Proceedings of the 4th Eastern Scotian Shelf Integrated Management (ESSIM) Forum Workshop, Halifax, Nova Scotia, 26–27 November 2008

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PROCEEDINGS OF THE 4th EASTERN SCOTIAN SHELF INTEGRATED MANAGEMENT (ESSIM) FORUM WORKSHOP, HALIFAX, NOVA SCOTIA, 25–26 NOVEMBER 2008

Edited by

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Executive Summary

The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative is a collaborative planning process for the Eastern Scotian Shelf marine region. The implementation of an integrated ocean management plan for this large marine area encompasses a broad range of users and stakeholder interests, including federal, provincial and municipal levels of government, aboriginal communities, ocean industry and resource users, environmental interest groups, coastal communities, and university researchers. In June 2008, the ESSIM Planning Office, housed in DFO Maritimes Region's Oceans and Coastal Management Division, released the final Eastern Scotian Shelf Integrated Ocean Management Plan (the Plan). To focus discussion on advancing and implementing the Plan's goals, objectives and strategies, DFO hosted the 4th ESSIM Forum Workshop at Pier 21 in Halifax, Nova Scotia, November 25-26, 2008. Approximately 165 participants from a broad range of ocean interests attended the workshop to discuss key enablers for advancing the Plan, including plan implementation mechanisms, action planning opportunities, marine protected area network planning and marine spatial planning.

The workshop format consisted of plenary presentations, a panel discussion, open-microphone sessions, ESSIM-related concurrent sessions, two keynote addresses and small-group discussions. These workshop proceedings are based on summaries of the concurrent sessions, small-group discussions, audio recordings, and notes submitted by presenters. The proceedings are intended to capture key points raised at the workshop, but may not include full details of all discussions. More detailed records from the small-group discussions, such as facilitators' notes, flip charts, and written comments submitted by participants, were also received by the ESSIM Planning Office.

A broad range of comments was received on plan implementation and action planning mechanisms, but general support exists to move forward with a combination of sectoral, issue-based and collaborative action plans to achieve the Plan's objectives. Support and acceptance exist for the approach to advance marine protected area network planning and for investigating the concept of marine spatial planning as a means to achieve ecosystem and socio-economic objectives. This recognition provides a basis for DFO staff to advance the workplan on next steps towards plan implementation.

The 4th ESSIM Forum Workshop represented one of the first steps towards plan implementation. As a continuation of the implementation process, the ESSIM Planning Office will work with the ESSIM Stakeholder Advisory Council to explore implementation options supported at the workshop. Three major themes that will be examined further are marine spatial planning, the development of a state of the environment report, and governance roles and responsibilities. In addition to these next steps, the ESSIM Planning Office will continue to improve communications and outreach on integrated coastal and ocean management, both within government and with the public.

Résumé

L'initiative de Gestion intégrée de l'est du plateau néo-écossais (GIEPNE) est un processus concerté de planification de la zone maritime de l'est du plateau néo-écossais. La mise en œuvre d'un plan de gestion intégrée de l'océan dans cette vaste zone maritime fait appel à un grand éventail de secteurs d'intérêt et d'utilisateurs, notamment aux gouvernements fédéral et provinciaux, aux administrations municipales, aux communautés autochtones, aux industries maritimes et aux utilisateurs des ressources maritimes, aux groupes qui s'intéressent à l'environnement, aux communautés côtières et aux chercheurs universitaires. En juin 2008, le Bureau de planification de la GIEPNE, installé à la Division de la gestion côtière et des océans de la Région des Maritimes du MPO, a rendu public le Plan de gestion intégrée de l'océan dans l'est du plateau néo-écossais (le Plan) sous sa forme finale. Pour faciliter la discussion sur la promotion et la mise en œuvre des buts, objectifs et stratégies du Plan, le MPO a tenu le quatrième atelier du Forum de la GIEPNE au Quai 21 à Halifax (Nouvelle-Écosse) les 25 et 26 novembre 2008. Environ 165 participants, venant de multiples secteurs du domaine maritime, ont assisté à cet atelier, qui avait pour but de discuter des facteurs déterminants pour faire progresser la mise en œuvre du Plan, comme les mécanismes de mise en œuvre, les possibilités de planification d'activités, et la planification de l'espace marin et d'un réseau de zones de protection marines.

L'atelier se composait de présentations en séances plénières, d'un débat de spécialistes, de discussions à micro ouvert, de séances de travail simultanées sur la GIEPNE, de deux discours-programmes et de discussions en petits groupes. Le présent compte-rendu de l'atelier est fondé sur la synthèse des séances simultanées, des discussions en petits groupes, des enregistrements des débats et des notes soumises par les auteurs de présentations. Il fait état des principaux points soulevés à l'atelier, mais ne relate pas nécessairement en détail toutes les discussions. Le Bureau de planification de la GIEPNE dispose de renseignements plus détaillés provenant des discussions en petits groupes, comme les notes des animateurs, les feuilles des tableaux de papier et les commentaires écrits soumis par les participants.

Les mécanismes de mise en œuvre du Plan et de planification des activités ont suscité des commentaires très divers, mais on est en général favorable à un ensemble de plans d'activités sectorielles concertées et axées sur divers enjeux en vue d'atteindre les objectifs du Plan. On accepte aussi l'approche de planification d'un réseau de zones de protection marines et l'étude du concept de planification de l'espace marin comme moyen d'atteindre les objectifs écosystémiques et socio-économiques du Plan. Cet appui représente une base solide sur laquelle le MPO pourra se fonder pour passer aux prochaines étapes du plan de travail et progresser dans la mise en œuvre du Plan de gestion.

Le quatrième Forum de la GIEPNE représentait une des premières étapes de la mise en œuvre du Plan. Afin de poursuivre le processus de mise en œuvre, le Bureau de planification de la GIEPNE travaillera de concert avec le Conseil consultatif des intervenants de la GIEPNE pour étudier plus à fond les options envisagées à l'atelier. Les trois grands sujets qui seront examinés plus attentivement sont la planification de l'espace marin, l'élaboration d'un rapport sur l'état de l'environnement et enfin les rôles et responsabilités en matière de gouvernance. Par ailleurs, le Bureau de planification de la GIEPNE continuera d'améliorer les communications et la sensibilisation concernant la gestion intégrée des côtes et des océans, tant au sein du gouvernement qu'auprès du public.

Acknowledgements

The ESSIM Planning Office would like to thank all workshop participants and organizers, as the interest, input and energy made the workshop a success. We also would like to thank the multi-sector ESSIM Forum Workshop Planning Team, which played an integral role in designing the workshop format and agenda. The Workshop Planning Team included representatives from the following organizations: AECOM; BLSmith Groupwork Inc.; Canada-Nova Scotia Offshore Petroleum Board; Canadian Parks and Wilderness Society - Nova Scotia Chapter; Coastal Coalition of Nova Scotia; DFO - Policy and Economics; Guysborough County Inshore Fishermen's Association; Halifax Regional Municipality; Marine Affairs Program, Dalhousie University; Maritime Aboriginal Aquatic Resources Secretariat; Sable Island Preservation Trust, Seafood Producers' Association of Nova Scotia, and Cathy Merriman, a marine conservation consultant.

The facilitated small-group discussion sessions were a key mechanism for stakeholder dialogue and input at the workshop. Thanks to Bruce Smith, the Workshop Facilitator, and his dedicated team of facilitators and reporters for assisting with these sessions:

Rachel Chudnow (Dalhousie University)
Penny Doherty (Fisheries and Oceans, National Capital Region)
Jonathan Feldgajer (Canadian Parks and Wilderness Society)
Becky Field (Dalhousie University, Marine Affairs Program)
Ken Huffman (Fisheries and Oceans, National Capital Region)
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Leigh-Ann Outhouse (Dalhousie University)
Rocky Yao (Conservation and Fisheries Observer, EAC Board Member)

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Heather Breeze
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Jennifer Hackett
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Heidi Schaefer
Maxine Westhead

Finally, we would like to extend a special thanks to members of the ESSIM Stakeholder Advisory Council (SAC) for hosting the workshop and serving as subject matter experts. The workshop was a great success as a result of your dedication to the ESSIM initiative.

1.0 INTRODUCTION

The ESSIM Initiative is a collaborative planning process led and facilitated by Fisheries and Oceans Canada (DFO) under Canada's *Oceans Act*. The Eastern Scotian Shelf Integrated Ocean Management Plan (the ESSIM plan), a key milestone for the process, was released in June 2008. The ESSIM plan has been developed and endorsed by the Stakeholder Advisory Council (SAC) and by the senior intergovernmental Maritime Provinces Regional Committee on Ocean Management. It contains 30 strategic objectives under the goals of collaborative governance and integrated management, sustainable human use, and healthy ecosystems. Implementation of this strategic level plan will occur primarily through sector led and multi-sector action plans.

As the steward of the ESSIM plan, the SAC hosted the 4th ESSIM Forum Workshop. The workshop was designed to both seek input and provide learning opportunities about integrated ocean and coastal management in our region. One of the main aims of the workshop was to identify the way forward and to focus on implementation of the ESSIM plan. A key component of implementation is marine spatial planning, an important and growing approach for integrated ocean and coastal management around the world. A focus session on marine spatial planning featured presentations by Fanny Douvere and Charles Ehler who have been working with the United Nations Educational, Scientific and Cultural Organization (UNESCO) to develop guidelines and best practices for marine spatial planning based on their examination of experiences around the world.

The workshop also featured sessions on the following topics:

- Perspectives on integrated coastal management in Nova Scotia
- A focus on Sable Island
- Linkages between integrated ocean and coastal management and environmental assessment
- Case studies and experiences from other integrated management efforts
- Marine Protected Area network planning
- Information and mapping in support of integrated ocean and coastal management
- Priorities and opportunities for implementation of the ESSIM Plan

Mike Murphy, Regional Director, Oceans, Habitat and Species at Risk Branch, DFO Maritimes Region, and Co-Chair of the ESSIM Stakeholder Advisory Council

Mike Murphy welcomed all participants and thanked them for attending. He noted that the workshop was the start of the next phase of the ESSIM process of putting the Plan into action in terms of priorities, making integrated management concrete, and making progress on achieving the objectives in the Plan. He thanked the Maritime Aboriginal Peoples' Council for food catering in the morning, and thanked the multi-sector workshop planning committee who designed the agenda for the 4th ESSIM Forum Workshop.

Captain Ivan Lantz, Shipping Federation of Canada, ESSIM SAC Co-chair

Ivan Lantz noted that the intent of the ESSIM Forum is to provide both listening and speaking opportunities, and invited participants to listen and respect the time for others to speak. Diverse views exist on the same themes and different opinions are expected on the questions posed in each workshop session. He asked participants to reach an understanding of differing views; it is not essential to reach agreement. The ESSIM process is built on the principle of consensus, not democracy where the majority wins. By making compromises, putting forward points and listening to others, he noted that a consensus position can be reached. He invited participants to learn from each other and share experiences to build a greater understanding. The contents of the agenda and the participant's packages were outlined, including the workshop discussion paper, the ESSIM online discussion forum, and the workshop evaluation sheet.

Mimi Breton, Assistant Deputy Minister, Oceans & Habitat Sector, DFO Ottawa

Thank you for the opportunity to join you here in Halifax for this 4th ESSIM Forum. I would like to thank the workshop planning committee and the organizers of the concurrent sessions, which included Mike Murphy and his team – and a host of others -- for their leadership in organizing this event.

I also would like to express my appreciation to Ivan Lantz and to Mike Murphy for their work as co-chairs of the Stakeholder Advisory Council, and to the other SAC members who are here today. I'd like to thank you all for the time that you have committed to ESSIM and the leadership that you have shown.

This location is so appropriate. Over the years, for many of us who came, or whose ancestors came, as immigrants, Pier 21 was literally the first step. They were looking to the land to build their future. Today, we stand here and look to the ocean where, in many ways, the future of our country is being built.

I am very pleased to see such a broad participation here today. These processes at their heart are about people, and the extent to which we can come together on a shared vision – like the one embodied in the ESSIM Plan.

The ESSIM experience is an important one for all those involved in oceans across the country – a number of who are here today. ESSIM has established a solid model and these lessons are now being applied in the Beaufort Sea and Placentia Bay / Grand Banks, which are moving toward draft plans, as well as in the other Large Ocean Management Areas. On the West Coast, PNCIMA is looking to initiate its own "forum" in 2009, learning from the lessons of ESSIM.

I know the path has not always been smooth. I think that all of us have learned from traveling this integrated management planning route. I want to recognize your efforts, and especially your perseverance. This work is not easy and the commitment you have shown - as organizations and as citizens committed to better outcomes for our country and for our oceans -- is recognized and appreciated.

As the invitation for this meeting noted, one of the main aims is to identify the way forward and to focus on implementation of the ESSIM plan. Over the next two days, we will work on making integrated management real for each of us and for Canadians.

I look forward to hearing your perspective on the important work that is underway on marine protected area network planning, ecosystem approaches to fisheries management, and marine spatial planning. Marine Protected Areas or MPAs are one of our key tools, and from the point of view of communicating with Canadians, they may be the most important tool that we have currently. In Budget 2007 we received funding for six new MPAs. These will be identified in the next few months and I look forward to reviewing the proposal coming from the Scotian Shelf LOMA.

Integrated management is not just about MPAs though. It is about supporting sustainable human use and improving coordination of management and regulatory systems. Integrated oceans management is a challenge to communicate, but we must find ways to make it concrete and therefore real to all Canadians. We must place a priority on both improving existing management and regulatory processes, and identifying and filling regulatory gaps where they exist. A key example is building stronger linkages between integrated management objectives and environmental assessment/regulatory processes for ocean and coastal development. This type of work will help to improve management efficiency and certainty for sustainable ocean activities.

At the core, our implementation challenge is how can we each change how we do business to better reflect the shared goals embedded in the ESSIM plan.

In closing, I want to reiterate my appreciation for your work and to reiterate our shared commitment to seeing it through. DFO (and the Government of Canada) is strongly committed to the Oceans Program, including integrated management, ecosystem approaches to management, and marine protected area

planning. This is evidenced by the recent Health of the Ocean initiatives, ongoing core funding to the Oceans Program, and the Fisheries Sustainability Framework among other items.

The federal government is committed to working closely with its provincial and territorial government partners to advance oceans management across the country. We are also committed to working with all ocean sectors and communities of interest.

Mike and his team will continue their role in leading/facilitating the integrated management process. The department also recognizes its role within the integrated management context and is working hard to incorporate and implement ecosystem approaches to the management of all of its programs and activities, including science, fisheries and aquaculture management, and habitat protection.

I have always believed that if integrated management was easy, it would have been done a long time ago. Change is always difficult. I am very pleased to see though that there are many of us pushing in the same direction. Thank you.

Greg Roach, Assistant Deputy Minister, Nova Scotia Department of Fisheries and Aquaculture

Greg Roach extended greetings from the Province of Nova Scotia and recognized the work of the ESSIM Planning Secretariat, the workshop planning committee, and the co-chairs and members of the Stakeholder Advisory Council. He noted that the plan development process over the last few years was not easy. This was a new concept – the idea of large ocean management areas. LOMAs under the Oceans Action Plan and the Oceans Strategy are new, and there are many diverse interests – fishing interests, environmental interests, oil and gas interests, etc. A lot of discussion has occurred and there are challenges to move the plan forward. There are delays in seeing the plan officially recognized and it is now up to everyone to move the plan forward.

Mr. Roach noted that the Province of Nova Scotia has a number of interests in the ESSIM area, particularly the fishing industry with nearshore lobster being the most important, but also important snow crab and offshore scallop fisheries. Groundfish fisheries exist in the ESSIM area, but have suffered declines in the last 20 years and have not recovered. However, large pelagic longline fisheries also exist. The fishing industry is the second largest export contributor in Nova Scotia. Only five years ago the largest export group was fisheries, but oil and natural gas exports now exceed fish exports. The key area for oil and gas activity off Nova Scotia is within the ESSIM area. The Nova Scotia government has an interest in fishing resources, energy resources, and in transportation. The Atlantic Gateway initiative was referenced for the major ports of Halifax, Sydney and the Port Hawkesbury area. All ports are influenced by the ESSIM area. Hence, economic activities and interests in this area are significant. There are also interests in the health of our oceans and sustainability of our biological resources. Sustainable use of resources is key and this suits the concept of the ESSIM philosophy.

It was stated that ESSIM is largely an offshore area, but that the boundaries are fuzzy. The offshore merges to inshore and boundary separation is unclear. The Province of Nova Scotia is keenly interested in coastal resources, and the ESSIM agenda is to address coastal management. Last spring the Province embarked on a coastal management strategy, and over the next several months the State of the Coast Report will be completed. That report will outline the resources, interests and capital in coastal Nova Scotia. The Province of Nova Scotia will use the report to consult with interest groups and the public in the development of a coastal management strategy. A coastal management strategy is to be completed by 2010, and that will work well with the ESSIM component of Nova Scotia where coastal plans could be nested within the large ocean management area. The Province hopes to connect very effectively with work on the ESSIM process.

It was noted that this is not the first attempt at oceans or coastal management in Nova Scotia, as the Coastal 2000 program started in the mid-1990s. It puttered along and there was little appetite for an operational phase. The climate has changed dramatically in the past 13 years and there is a lot more

interest in seeing integrated management and ecosystem management become an operational reality for coasts and oceans.

Mr. Roach stated that the ESSIM Plan is quite an accomplishment, but noted that ecosystem management means different things to different people. It could mean only catching the target species and not impacting other species, or it could mean considering all the biological and physical parameters of the environment for any activity. Ecosystem management is a challenge due to differing opinions. The same is true of integrated management. A number of different agencies exist, all with their own clear legal mandate and client base. He stated that considering other interests and working together on management plans that may actually influence other players is a challenge to discuss, let alone implement.

Mr. Roach indicated that the Province is ready to go forward with coastal management, and that plan implementation should be interesting. Forums like ESSIM can help to move in that direction. There will be challenges with implementing the Eastern Scotian Shelf Integrated Management Plan. He encouraged respect for the interests of others and recognized that it will be an iterative process. Any opportunities for achieving integrated management and a better way of dealing with our oceans and its resources will be a success. He urged participants to start turning a challenging concept developed over a number of years into a more challenging reality. Mr. Roach wished participants good luck for the ESSIM Forum workshop.

Overview of the Eastern Scotian Shelf Integrated Ocean Management (ESSIM) Plan
Tim Hall, Regional Manager, Oceans and Coastal Management Division, DFO Maritimes Region

The Eastern Scotian Shelf Integrated Management Initiative was announced 1998 and was the first integrated ocean management pilot under the *Oceans Act*. The initiative was set up to address multiple ocean uses and jurisdictions, increasing competition for ocean space, and the need for an ecosystem approach to management. The main objective of the initiative was to develop a collaborative management and planning process that would lead to the development and implementation of an integrated ocean management plan for the Eastern Scotian Shelf. The ESSIM initiative currently focuses on the offshore portion of the Eastern Scotian Shelf, (from the 12-nautical mile (nm) limit to the 200 nm limit of the Exclusive Economic Zone (EEZ)), however, the intent to expand the planning area in the future.

The Eastern Scotian Shelf Integrated Ocean Management Plan (the Plan) has been developed. It is a strategic level plan that provides long term direction and vision for the area. The Plan builds on, improves and coordinates existing management jurisdictions and responsibilities.

Development of the Plan was done by all sectors and stakeholders through the collaborative planning model and the government sector structure and implementation will continue to occur through these structures. The collaborative planning model consists of the ESSIM Forum; the Stakeholder Advisory Council; and the Planning Office. The collaborative planning model allows for input from all interested and affected stakeholders. The government sector structure consists of the Regional Committee on Ocean Management and the Federal-Provincial Coordinating Committee. The government sector structure provides intergovernmental program and policy coordination. Government authorities remain responsible to carry out their existing mandates.

The Plan follows an objectives based management framework where high level goals and supported by strategic objectives and management strategies. The Plan outlines a common set of goals and objectives for collaborative governance and integrated management; sustainable human use; and healthy ecosystems. These goals are supported by 30 objectives related to integrated management; information and knowledge; social and cultural well-being; economic well-being; biodiversity; productivity and marine environmental quality. Management strategies for these objectives set out the general course of activity that should be undertaken to meet the objectives.

Implementation of the Plan will occur through more specific action planning processes. Action plans will provide more detail on activities necessary to achieve the objective. Action plans will include information on roles and responsibilities, timelines and deliverables. Regular status reports will also be developed to report on progress.

Eastern Scotian Shelf Integrated Ocean Management Plan: From Planning to Practice
Melanie MacLean, Ocean and Coastal Management Division, DFO Maritimes Region

With the Strategic Eastern Scotian Shelf Integrated Management Plan (the Plan) complete, it is now time to move forward with the implementation of the Plan. The Plan is strategic in nature and scope, and does not provide detailed prescriptions of all measures required to achieve its objectives. There are two primary ways through which the Plan can be advanced and implemented. The first way is by incorporating its principles, objectives and strategies in existing management and decision-making processes and mechanisms. The second way is through the development and implementation of specific action plans to respond to the strategic level Plan. In many cases, these two implementation approaches may be interrelated, wherein one process may lead or result in the other.

Government departments are expected to support implementation of the Plan through their respective legislative and regulatory jurisdictions. Endorsement of the Plan by a government decision-making authority demonstrates a commitment to and accountability for implementation of the Plan in accordance with departmental mandates, priorities and capacities for ocean management. The Plan identifies a range of tools and measures that can be used by government departments to incorporate the Plan into their policies, programs and activities. . These include policy frameworks, departmental strategic and/or business plans (e.g., annual plans and priorities), and performance reporting processes.
Acceptance and implementation of the Plan by affected ocean sectors, groups and individuals may occur through a variety of ways. The Plan identifies a range of tools that can be used to demonstrate commitment to and accountability for the Plan, including codes of conduct/best practice statements, organizational terms of reference or mission statements, activity applications and environmental assessments, and business plans.

The implementation of objectives and management strategies contained in the Plan can also be undertaken through the development of shorter term action plans (e.g., 2–3 year cycles). These action plans may be sector-specific, issue-based or collaborative in nature. For sector-specific action planning, certain objectives in the Plan are directly relevant to a specific sector or activity type, and are most effectively addressed through existing sector management processes. The Plan lays out the responsibility of all sectors to consider and advance the objectives through their respective planning and management. Collaborative action planning processes may involve multiple sectors and government departments, depending on the nature of the objective(s) being addressed and outcomes being sought. Issue-based action plans may be used to focus on specific topics or management concerns, often considered to be of a priority nature. The management issue may only of primary concern to one sector, or it may cross multiple sectors and interests.

Successful implementation of the Plan requires an effective and practical approach to performance evaluation and reporting. The Plan identifies various potential evaluation and reporting mechanisms.

It is also important that roles and responsibilities for implementation of the Plan be clearly defined and understood. The Stakeholder Advisory Council provides leadership, guidance and stewardship for implementation of the Plan. It also has a role in monitoring and evaluation of performance and process; the senior level Regional Committee on Ocean Management has an oversight and coordinating role for integrated ocean and coastal management in the Maritime Provinces; the ESSIM Forum can provide input to the implementation of the Plan through a range of mechanisms; and the Planning Office provides logistical support, expertise and capacity for implementing and monitoring progress under the Plan.

2.0 PANEL DISCUSSION ON ESSIM PLAN IMPLEMENTATION

Following the presentation, members of the Stakeholder Advisory Council (SAC): Ivan Lantz, Shipping Federation of Canada; Kevin Squires, Maritime Fishermen's Union; Roger Hunka, Maritime Aboriginal Peoples Council; Karen Traversy, Coastal Coalition of Nova Scotia; and Jennifer Smith, World Wildlife Fund, responded to a series of questions related to Plan implementation.

Panel Questions
Why is your sector involved in ESSIM? Why does your sector feel that ESSIM is important?
What are the major challenges facing your sector as you move forward with implementation of objectives in the ESSIM plan?
How do you see your sector activities changing as a result of your involvement with ESSIM? What mechanisms/tools will be used to implement? Provide examples if relevant.
In addition to work within your sector, do you see opportunities and/or benefits for collaborative action planning to advance ESSIM objectives?

Jennifer Smith, World Wildlife Fund

In thinking about why the environmental, non-governmental organization sector has been committed to ESSIM from early in the process, our interest is in restoration and conservation of the ocean ecosystems that we rely on. We talk about the services that the oceans provide and this ocean, in the context of ESSIM, provides a moderating force for climate, a sink for greenhouse gases, a vital link in the water cycle, and it's a protein source that's important for our economy as we move into a time of growing uncertainty about food security. Our interest as NGOs is in making sure we can continue to rely on those services into the future, to continue to fish in this region and use it in other ways.

We don't own those values and that mission. That's something we share – everyone who's been involved in the ESSIM Plan shares that concern as well. But in our case it's paramount for being involved. Canada's oceans agenda sets out integrated management as a delivery mechanism for a couple of tools that are critical for achieving that big objective. Things like an ecosystem-based approach, ecosystem-based fisheries management, and networks of marine protected areas, among other things. We see integrated management in ESSIM as the conduit for putting those things in place in this region. That's really at the core of why NGOs have been involved in ESSIM.

We're not a sector that has a lot of activities on the water on a day-to-day basis, so we can't make a lot of changes to the state of the ecosystems unilaterally through changing our own activities. For us, change comes about through collaboration. Whereas in the past we may have been able to have bilateral relationships with individuals, organizations and sectors, ESSIM gives us an opportunity to come to the table with sectors and address these issues together and identify our shared objectives. That's really a good fit for our sector because we strongly believe that human well-being and ecological health are very closely linked, and that's well reflected in the ESSIM Plan.

In terms of challenges for moving towards implementation from the point of view of environmental groups, it is about how we strike those collaborative relationships and what can we do aside from on-the-water actions that other sectors can take, and what we can do to contribute. Can we be facilitators, relationship builders, and help to get action plans off the ground? Our challenge really is to be creative, in terms of how we can best contribute.

In terms of the change that ESSIM has meant for us and our activities, whereas in the past we certainly have been increasingly interested in collaboration, especially on a bilateral basis, we now have this Forum for bringing things to the broader stakeholder community. For example, a lot of our organizations have capacity in science, planning expertise, and mapping. We have concrete things we'd like to contribute, so ESSIM has given us that opportunity and you can see that reflected in the poster section, in the session on spatial planning, and the work on spatial action planning. It's been an opportunity for us to plug those things in, those areas of expertise.

We've learned a lot in the process. I've certainly learned a lot about the interests and motivations behind the other sectors and individuals around the ESSIM table, learned about neat initiatives that are happening like reducing discards, the mortality of discards, reduced dumping of garbage at sea, and projects that other sectors have undertaken on their own. When we learn about what particular issues other sectors are interested in working on, we can be more responsive in our work planning and find ways that we can work together.

Collaboration is the way forward from our point of view, from action plans that we initiate to being involved in action plans that other sectors advance as well. That's really the spirit of integrated management. We're much closer to that now than we were five years ago, so that's very encouraging from our point of view.

Kevin Squires, Maritime Fishermen's Union

I should point out that I'm really speaking for the inshore sub-sector and even then I'm only speaking for one organization in the sub-sector. That reflects the challenges that we as a fishery bring to this sort of discussion. In fact, integrated management is not a very high priority for the inshore sector or for the fishery sector in general. It represents more of a threat and a burden where the fishery sector in general is again in crisis mode. We've got a lot of pressures on us, so it's a difficult time. That's not news in the fisheries sector, but to put integrated management into perspective, it's not something we can devote a lot of time to. As a small organization we're restricted in terms of manpower. We're also in a position of being a small organization having to presume to speak for other organizations, so it gets complicated and difficult.

I have a personal interest in integrated management, having been involved in my own area in a number of projects and developments, such as offshore seismic that became problematic for the fisheries community: how to have input into that, how to make sure their interests were preserved, and the discussion on whether seismic should go ahead. It was a very restricted question; it didn't discuss what the implications of offshore oil development were in general. We need to find a forum where we can better express our interest and concern. Integrated management gives us that opportunity. How we get people interested in doing it is the difficult thing.

The other side is this becomes a lot more important to us as ESSIM and integrated management approaches the coast. This has largely been an offshore discussion, but as we get inshore where most of our activity takes place then we need to be aware of what the developments are and what the changes mean for us.

Organizational capacity is very difficult for us. It is one of the challenges we face as well as the other challenges fisheries are going through, e.g., economic viability difficulties that are now being experienced by the fishery. Management challenges, management changes at DFO, fisheries certification is a large issue we've been dealing with, and the IM Forum gives an opportunity to look more globally. You can tell from the colour of my hair that I'm not a new fisherman. I'm the average age of fishermen right now. The demographic we have makes it very difficult. People are more interested in making their way out of the fishery as opposed to learning how to deal with a new management structure and a new set of approaches, so that makes for difficulty.

ESSIM provided a forum for one of the activities that our organization proceeded with, the Clean Oceans Initiative of the Maritime Fishermen's Union, which has a poster. ESSIM has provided an opportunity for us to take our discussions on reducing waste from our fishing operations as a starting point to discuss, within our own sector, how we can become environmentally responsible operators. The fact is most of our energy and our interest is going into catching as many fish as we can. We haven't thought a lot about doing it carefully and doing it sensitively. There's an educational component we have to address, there's an awareness component, and ESSIM has provided a good forum to support us for that. That extends into the support that we've received from ESSIM in terms of a mutual understanding of what other

interests are at the table. When you look at the principles of the Plan, those principles will sustain the fishery that we depend on so heavily. The ESSIM Plan and ESSIM Forum have provided a backdrop for how we make our living. There's been a really good mutual support there.

Roger Hunka, Maritime Aboriginal Peoples Council

The Maritime Aboriginal People's Council is a regional body that represents three councils – one each in Nova Scotia, PEI and New Brunswick. Our interest has been being part of the community that lives on an ancestral homeland of the Mi'kmaq. The Mi'kmaq have aboriginal people also living in all three provinces. There's a rights holder issue and our involvement has been basically to raise awareness that peace, friendship and trade requires an understanding of our long history on the Mi'kmaqty, as well as our long history of resource use in the inshore, nearshore and offshore, as well as our world view of how we see uses of resources.

We became involved when we realized that large ocean management areas were becoming a reality. Canada lags behind the rest of the world in doing this, so our brothers and sisters around the globe were telling us "beware and get involved" because it's important. Being involved in ESSIM just takes in the Native Council of Nova Scotia, but there are other organizations in New Brunswick, PEI and reserve communities that should take heed because they'll be involved in the Bay of Fundy, the larger Northumberland Strait and other areas that become large ocean management areas.

We ought to raise the fact that as rights holders we bring a perspective to work together, to share what we think on the oceans, and how their degradation isn't really helping anybody, neither the users nor ourselves. We have communities that have inshore uses – fisheries, food, social and ceremonial. It touches our lives in many ways because all of the activities that a federal or provincial government have come to haunt us. In order words, we need to be involved in species at risk, oil and gas exploration, all of these agencies, environment assessment, Transport Canada, Parks Canada – they all come to the communities and ask, what do you think?

We thought that being involved in the Forum would have a larger view of how the rest of society looks upon the challenges that the oceans raise, and ESSIM is an exciting approach where it's truly collaborative. It also gives us a door to decision-makers, in a collaborative way. In other words, if 20 people ask the Deputy Minister to give a response, hopefully there'd be a letter to 20 people instead of one. It's hard to say no to 20 people compared to one. We're hoping that ESSIM does carry a bit more clout than an individual; even though we are rights holders, they often tell us no.

Raising the world view, our eco-centric view, it's something that many of our representatives on SAC will be raising. It's a world view that not many people are familiar with, and that's the view that everything is inter-connected and inter-dependent; that it's not in isolation. What we do to the waters will affect us. What we do to life in the waters will affect us; that applies to transportation, fishing, cables, and oil/gas lines. Using salt from the water and the wind and waves, all of these things are part of a world that does affect everything and has an inter-connected relationship to everything else. Raising a view, whether it's indigenous knowledge, or folklore, or whatever way people want to think about it, it sometimes helps people to pause and say, well I never thought of it that way. We hope to bring that to the Forum.

The other thing we bring to the Forum, it allows us an opportunity to raise at the stakeholder level, the concepts of sustainable development and precautionary approach, all of these words we hear today, and not really new or exotic to Mi'kmaq and aboriginal peoples. They've been around for thousands of years. The Mi'kmaq use the term *netukulimk*, which embodies a whole approach to using waters, and that you must do it in a way that allows the future to have equal access and enjoyment.

Our sector activities are changing as our communities become more involved in different aspects of ocean management areas, be it fishing or whatever. Their practices will be better understood and they may apply better practices if they find the same from other resource users equally. We're realizing we're going to have a lot of work to do. Some people think that the concepts of social progress, economic

development and environmental integrity, which are new buzzwords, can be brought together in balance. Being involved in ESSIM I see they are the challenges of not only society as a whole, but they're not balanceable. You can't balance environmental integrity with economic development nor social progress. It's a matter of looking at what society is prepared to take from the environment, and is it prepared to let the environment and environmental integrity rule the hour, and then economic development at the same time. I'm finding that those three terms that we thought were balanceable, are not balanceable. ESSIM is wonderful – the three strategic goals and the many plans available are going to give us a good opportunity to test out action plans, and the will of society and governments to have an overall healthy, productive, clean ocean for animals and humanity.

Karen Traversy, Coastal Coalition of Nova Scotia

We are a voluntary network of approximately 40 coastal community organizations and individuals across the province concerned about the future of Nova Scotia's coastal areas, including coastal communities, watersheds, wetlands, beaches and headlands. We advocate for a sustainable development policy for the province. There isn't one now, for the benefit of all, not just some Nova Scotians. We are one of two community-based organizations on the Stakeholder Advisory Council. The other is my colleague Ray White from the Town of Canso. The other representative is Karen McNulty. We were not a member initially of the SAC. The Department of Fisheries and Oceans had a community consultation about ESSIM in 2005, and after that consultation, they thought to add some community voice to the table.

First, it's important to distinguish between community to respond to these questions. We've heard earlier that the Plan distinguishes between communities of interest and communities of place or location. We think ESSIM needs a constituency of communities of place as well as interest. The CCNS has direct links with communities of place and that's what we bring to the table. We see our role as bringing the voice of coastal communities to a table within ESSIM where a lot of communities of interests are being discussed.

Why are we involved? Well, we're primarily focused on the coastal area in the Coastal Coalition of Nova Scotia, but we support integrated management initiatives and the collaborative process that ESSIM uses. We just advocate that that be brought ashore to the coastal zone. We're at the table to learn from that process and continue our advocacy for the application in the coastal zone. We like the process and approach – it's integrated across sectors; it's ecosystem-based and science-based; it embodies collaborative planning processes to address and avoid potential ocean-use conflicts – that has to be a good thing. It's transparent, that's a key thing for us. Open information-sharing allows us to participate up front in issues, without always being in a reactive mode, criticizing government and others for actions that have been taken. We want to be part of the process. The other aspect is that the ESSIM process allows us to build capacity of our communities to participate in this process, because it does take capacity. We value the aspect of influencing the use and management of ocean resources. We like it because it's inclusive. We like it because they asked us to play. As a non-government stakeholder we are at the table. Other non-government members have access to other planning processes, such as fisheries management plans. Communities are not usually invited to those tables.

The second question has to do with the challenges facing our organization in being involved in the SAC. We have a hard time engaging coastal communities in an initiative that is essentially offshore, but which is affected by offshore ocean activities. That's difficult to do with communities. The ESSIM Plan doesn't include coastal areas yet. The coastal zone is an area of influence for the ESSIM area, as well as an area of impact. It's difficult to communicate relevance of ESSIM for coastal communities. You can't see activities in the offshore, yet the coastal zone is certainly an important one. A lack of awareness is out of sight, out of mind, but the issues going on there have great influence.

Capacity – most community organizations are voluntary, lacking funding and organization for continuing participation, in addition to their local activities, and other engagement processes with government. Integrated management requires an understanding of multi-level government legislation, policy, programs and regulatory mandates. This is complex in the offshore, and it sure is complex in the inshore, and we recognize that. But to be able to play you have to be able to understand, and ESSIM allows us an

opportunity to build our understanding. If we don't have that understanding, we can't contribute. We can bring voice, but we can't actively play.

What activities would change as a result of our involvement here, or the benefits of collaborative action, or areas of work we could participate in to advance specific issues? Because we don't have an institution behind us funding an organization, our sector role in advancing ESSIM differs from that of other SAC members. We can't take a leading role, in all honesty, but here's what we could do. We can continue to bring the community voice to the table and provide feedback. We can communicate and interpret ESSIM Plan objectives and initiatives to community-based organizations. We can work to make ESSIM accessible to community organizations. We can collaborate with our partners here, both government and non-government, in advancing their initiatives in support of the Plan, including hands-on stewardship activities such as sampling, coastal watch, activities of that nature. We can promote community participation in these initiatives through our networks and provide local knowledge where relevant. We do have local knowledge of coastal areas throughout the province. We live and work in this area. We are experts too. We can participate in the monitoring and evaluation activities, both the implementation outcomes and the eventual outcomes, i.e., changes to the ocean, and we can continue to play a role in that regard on the SAC. Down the road maybe we can initiate stewardship activities of our own. We value our participation in ESSIM and look forward to partnering with other SAC members, government and non-government, to advance ESSIM-based initiatives.

Captain Ivan Lantz, Shipping Federation of Canada

My day job is as the Director of Marine Operations for the Shipping Federation, and I am involved in the operation of ships. My sector of interest, and the Federation's interest for the past 105 years, has been international shipping and overseas trade. The members of the Shipping Federation are interested in overseas trade. They look after the ships that carry overseas trade and they are the ship owners of the overseas trade. The members of my association look after the large tankers that call at Placentia Bay and Port Hawkesbury, the container ships that call at Halifax, the gypsum carriers out of Bras d'Or Lakes, Halifax and in Hantsport; and some of the coastal tankers.

When they invited me to come to ESSIM and told me they were going to have an integrated management plan and do ocean planning, my first reaction was, I'm going to get zoned out. I'm going to be excluded from something. I'm going to be told that you can't navigate here any more, and I knew that my members needed to be able to navigate because navigation traditionally has been if there is water deep enough, I can go. Navigation hasn't necessarily been controlled and it hasn't been an integrated part of the community out on the ocean. Now is its opportunity to be there.

Recognizing that navigation and ocean shipping was being challenged on a number of issues, we felt that if we get in the integrated planning process then we're not out of the process, we're able to be in the process. It's a bit of a new adventure for international trade and shipping, but a place where we're extremely comfortable to be. We have been welcomed and I feel very warm in that welcome.

One of the major challenges to navigation and international trade is that there are other growing activities in the same area, so it's a human use issue. What are the human use issues that could affect us? There's fishing, aquaculture, pipelines, cable-layers, exploration activities, and all of these will interact with navigation and the way that commercial ships have navigated, and maybe there will be places where we can't go. New places where we cannot go, we don't go. We can probably go as navigators, but we have to take other precautions or have sensibilities to marine protected areas and areas of significant biodiversity, as these are identified. For navigators and marine travelers this is becoming a relatively new aspect: places they should go, should not go, or should take extra precautions with respect to noise, wake, and speed, etc.

How have we changed over the years? Navigation has significantly changed over the years. In the 1960s there was a big oil transportation boom, a tremendous amount of pollution going on, and oil was literally and figuratively dumped in the sea. That stopped and we don't dump oil at sea anymore. The oil industry

and communities around the world got together through international conventions and cleaned up their act because they knew they had to in order to continue to have a social license to navigate and trade. Since then we have garbage controls; we have waste management, we don't dump plastics, we don't dump garbage overboard anymore. In the past 20 years, we've dealt with invasive species through ballast water management so we are taking measures to prevent the introduction of non-indigenous species that will harm aquaculture, fisheries, and the ecosystem. We're now concerned about air emissions, noise levels, and the ESSIM Plan will bring us together with other people that are navigating – fishers, pleasure craft, and other offshore interests that are navigating – and we pay attention to them.

We've taken measures to avoid the right whale, to avoid Roseway Basin when the right whale is there. On Stellwagen Bank they've put in speed restrictions when the whales are there, and in the approaches to the Bay of Fundy. Life is changing in the marine navigation industry, and it's changing because we understand other people's issues, because we come to a Forum like ESSIM and we learn about other people's issues, and we input into other people's issues, and make our concerns in their place.

We are included, not excluded, and it's a good feeling to say that there's not just "them" out there in those big steel ships; there's a whole community out there as well, and there are people like me that come here to listen. I want to interact with other users. I want to be able to help with the plan of ESSIM, to help with its implementation, and to advance the ideas of the precautionary approach. I want to keep going with the collaborative approach. When I first heard "collaborative" and "integrated" and "overarching social responsibilities," I thought, "Whoa, whoa, whoa." My members were asking, do I have to deviate again? What's going on here? Where's the ice-breakers? They had other issues to deal with. I get challenged with those kinds of issues, but my members also need to interact with fishers because that allows them to continue to work within the community, to be a responsible part of the community, and it's a relatively new place to be in terms of international trade, big ship operation and management, because for a long time they have been seen as not part of the community. I believe that this ESSIM process incorporates us and we are very comfortable being here.

Questions and Answers

Unattributed questions from the floor and responses from panellists are provided below:

Q1: Traditionally academics have worked within their disciplines and with the individual sectors, while more recently some academics have been interested with integrated aspects of ocean management and the integration of academic disciplines. Do you think we can develop a better relationship with the academic sector through the ESSIM Plan process? Can we maintain our individual sectoral interests, e.g., biologists working with World Wildlife Fund, or the Faculty of Management working for the shipping industry? It was stated that we need to strengthen the integrated aspects, working more with the inter-disciplinary approach. Do you agree? Can we develop a mechanism to enhance that approach?

Roger Hunka: Obviously the integrated approach is not new to other disciplines. It's going to be demanding on you as the ESSIM representative for academics, to bring back to all the universities that may have expertise in oceans and other disciplines that touch all the sectors in ESSIM to formulate an integrated approach, to discourse and participate at ESSIM as observers, and bring in new people learning to see how ESSIM is operating. The challenge is great for academics to look at the integrated approach, because that is the only approach. You can't look at only one sector of the ocean, not just the aboriginal aspects, the shipping aspects, the munitions and so forth – everything is integrated. It's all one holistic view – it's very easy for aboriginal people who looked upon the world as a holistic aspect. You're on the right track.

Jennifer Smith: Thinking about how the nature of academic advice that we'll need is changing as we move into the implementation phase and action planning, it will become more pragmatic and we'll need the assistance of researchers to help us move past debating the information base, because we'll need to move very quickly into action and making decisions. The inter-disciplinary folks have that big picture view, and can understand and most readily deploy their expertise to support that kind of decision making. It's a little more pragmatic than what we've been doing so far.

Ivan Lantz: There will be requirements for data and research, and parties that need to be integrated or to understand each other. If they can integrate their issues, we'll need the data to support that. Ecological and aquatic species data is not all that old. A lot more data is out there to be had, and we require it in order for us to continue to understand. Through the future processes of integration and understanding, there will be integration and collaboration on the requirements for data support through research.

Q2. A question from DFO Pacific Region related to advice for the Pacific North Coast Integrated Management Plan. What would be the one lesson to focus time and energy on for success, and what would be the landmines to avoid that could take us on a tangent? From all sectors, what should we focus on and what we should avoid?

Ivan Lantz: You need to talk with one another a lot, you need to gain confidence in each other as you build a stakeholder advisory group, listen to the community, as you have a forum, etc. You have to give people time to know each other, have confidence in each other, and then gradually work together as they find the challenges and commonly understand. That took time, patience, and the staff at the Planning Office gave us time and patience to carry on, and to continue to arrive at our product.

Karen Traversy: From the community sector side of things it's very important to understand that you must build constituency for any initiative. I know a bit about the PNCIMA initiative and you're certainly operational in the coastal area, but you do have to ground it in the voting public. There needs to be real people, real communities that exist that are engaged in your initiative from the get-go, and they have to be brought along because they are the constituency to ensure that there are resources and focus of the people who fund this exercise and continue to on a priority basis. In other words, you have to keep the heat on. Without communities of place, that is even harder to do.

Roger Hunka: Just a word of caution from an aboriginal point of view, you should look at inviting the aboriginal peoples. In the Maritimes it's a bit different. We have Mi'kmaq that live in all of Nova Scotia, New Brunswick and PEI and parts of Newfoundland and Maliseet, and you have on and off reserves. It's basically through three or four organizations. Out in British Columbia you have a multitude of aboriginal nations – the Haida and all the way down. You cannot just talk to Indian Affairs. Talk to the nation and tell them what's happening because each of the nations are rights holders. You're not going to get anywhere unless you deal with the Haida. If they're not for it, it's not going to work because they have a long history. I'd suggest that you spend time approaching them all the way from Vancouver to the Haida. Whatever the dimensions the plan will be, and you'll find that the aboriginal people are more than accommodating, work collaboratively. That's the history of aboriginal people in Canada, to be inviting and collaborative.

Kevin Squires: I echo what everybody else said in terms of time. The landmine would be expectations that you can get this done in a year or two. It's been incredibly important on SAC to have built up those reputations, the relationships between people. We are getting to know each other and know who we can go to talk to and who we can get cooperation and support from, and it has built up a level of mutual understanding and mutual support, which is important to figure out how we are going to do this thing that's so different from what we've been used to in the past.

Jennifer Smith: At ESSIM we've been feeling our way in a new process at a time when Canada's oceans agenda was just beginning to take shape. Now that's starting to crystallize and there's clear signs of Canada's commitment and actions that will be taken in the next while, you might be able to create a bit more impetus in the PNCIMA process by setting concrete outcomes from the process. You have a bit clearer end-game and outcome. In terms of landmines, not shying away from controversial issues up-front because those are the things that came up for us later in the process that may have slowed us down, at the tail-end just when we thought we were done. Deal with those head-on, early.

Q3. I'd like to congratulate you all and all of us that are working in this Forum to bring together the various stakeholders – industry, inshore, First Nations, fishers, the environmental community. It's a worthwhile exercise that is hopeful, seeing people working across sectors and trying to make a difference. Now that we've moving into implementation and action planning, we need a spate of tools, and those tools must

include regulations and legislation that supports the ESSIM initiative. The world is more like a hand grenade and the pin's been pulled, so though I understand and respect your opinion that we shouldn't feel rushed to make this process work, we have the real world that's demanding that we make it work because we're at threat. The fishing industry is at threat; the global environment is at threat. We have increasing areas of oxygen depletion, dead zones in oceans. We have changes in salinity that's now been documented. There's change in the ocean's ability globally to carry the kinds of diversity that it had in the past. We are working in an era of deregulation where we have the federal government hell-bent on removing any reasonable oversight, on any kind of constructive dialogue like our ESSIM process. We have an oil and gas industry that wants to develop at all cost. We have a federal court that has ruled that fishing impacts on habitat are not a work or an undertaking with respect to the legislation, the *Canadian Environmental Assessment Act*, so our courts will not look at what the impacts of the various types of fishing technology are. We're left in a void where virtually the impact of a dragger and a hand-liner is treated similarly, much to the detriment of what we are trying to do. My question is, given these problems and the fact that we don't seem to be having a supportive regulatory framework, in fact unless things have changed in the last month or so, the federal minister has not yet signed off on our Plan. We're all here carrying on our work without even an acknowledgement from the federal minister that our work matters. We have this problem and without this body being able to have a meaningful input into developing both regulations and legislation to integrate in a meaningful and timely way, what chance do we have? I'm very concerned that all of the good will and good work that we're doing here by these various sectors is in fact smoke and mirrors when we have a federal government intent on deregulating and letting industry have its way without any reasonable oversight. I'd like comments on the real politic between what we are trying to do, with the best of our intentions, and the countervailing political currents, that are in fact undermining not only what we're trying to do, but in fact undermining the ecological framework that we're trying to preserve.

Roger Hunka: That's a big question; a lot of prefaces to that question. I would look at it differently. I would take the position that regardless of what level of government, whether it's the federal or the provincial government, their role is to abandon oversight, but that's okay. We have to look at it from a larger point of view, and ESSIM and large ocean management areas, the collective of having a multiple body, a body of multiple disciplines and citizens of various walks of life, experiences and knowledge, outweighs the lack of oversight in Ottawa. Historically, when you look at the conventions that have come about at the United Nations and the powers, these are all brought about by groups such as this Forum. I see this Forum being more powerful. I see this Forum growing with action plans, with long-range strategies and simply say, "Well okay Madam Minister, don't sign off, keep the pen in your hand for the next five elections, I don't care." Nova Scotia's ocean users come to the ESSIM area. Remember there is a plan, there is a forum, and we do have action plans. What's your responsibility for that Plan? What are you going to contribute to it? Are you going to continue to destroy the corals? Are you going to continue to be irresponsible in munitions dumping? That's what this Forum is about and that's the unique structure of this; you do that report card because your report card is not only on the strategy, it's a report card on the actions of the two levels of government, and in essence three levels of government – municipal too.

Q4. I'm from the David Suzuki Foundation, living in Vancouver. We're very interested, as earlier mentioned in PNCIMA, and are trying to figure out how we can move forward with our plan, and I'm curious of your opinions on how, or the one thing you might desire to move from this place where you've got objectives to actually realizing strategies that attain those objectives and realize changes in our oceans.

Ivan Lantz: To move from objectives to actual deeds is what you're asking, and one of the places where we needed to go before we continued work on specific action plans that would realize the objectives is to have this Forum and to start to hear from the Forum the priorities that are in people's minds in the scientific community, in the public interest, so that we can go there and help us build those action plans. That's what's going on now and that's our next strategy – we spent a lot of time building a management plan that has all the elements that were required of it – integrated, collaborative, to be a consensus process, to have ecological and conservation objectives, and respect the human uses, how you bring in all the existing regulatory measures and the different bodies of natural resources versus environment assessment. It's time that we hear from the Forum, so through the sessions that we're going to have this

afternoon and tomorrow, we're going to be able to build priorities and start to move on the action plans that come up.

Jennifer Smith: Reflecting on the nature of the question of moving from what has been primarily a planning initiative, to build consensus around that. One of the elements we need to flag along the road that we've been on, is the question of legitimacy. We have a highly bureaucratic process, which has invited in other stakeholders and made it a broader thing, but it is a lot of bureaucratic architecture – functioning committees, reporting to other committees – and for community organizations coming to it, they would say what legitimacy does it have? All the departments have their mandates and have the monopoly on regulations, legislation and policy. Where's the traction in the initiative? We cannot let two ideas that have been discussed just go to the sidelines. I don't want them to interrupt our forward motion and our work, but under the *Oceans Act* there's provision for legitimacy of this type of initiative and that they sign off on the plan at the political level.

Regarding the status of the ESSIM SAC, what status does it have now? It's there by policy or flavour-of-the-day perhaps; not likely because it's been around for a while and has a lot of vocal members. Under the Act there's opportunity to have the Minister designate the Advisory Council as a legitimate advisory body to the Minister.

Those two elements are legitimacy of our work and our body as advisory. That doesn't mean that the Minister has to take the advice, but we have legitimacy in providing that advice. It gets us over that bureaucratic infrastructure that we deal with every day. Secondly, we need a plan to overcome the issues that are interrupting the ability of the Minister to officially sign off on our plan at some point. I don't think we can overlook that. I hate to raise these flags, because we want to be optimistic and move forward, but legitimacy is huge out there, even just from an advisory body.

Roger Hunka: One of the greatest challenges would be to set up information signs in the whole ESSIM area. We care about the oceans, the dead zones, and that's what ESSIM is all about. We're going to watch that. It's important to make the public aware that these are the issues we are dealing with.

Kevin Squires: We need the various departments and all stakeholder groups to take seriously our responsibility of participating, accepting and agreeing to this Plan. We've had an example in our own area, a cable laying incident that occurred, that had it come to the table we might have been able to communicate with the local community and made it better for everybody. This is a really good format for communicating projects that are taking place, and we have to learn how to use that so the benefits of integrated management can be manifest. That means the departments have to say, "Okay, how do we bring the integrated management approach to bear in terms of our own developments?" In our area we've had new fisheries develop and we're not quite sure how that process should proceed in future now that we have the ESSIM Plan. Should this new fishery not be discussed at the ESSIM table, or should DFO continue to develop it according to their own discrete process? Now we need to step beyond that and say we're going to commit to using this table consistently across the board.

Q5. It may be buried in your Plan, but it is one of the greatest challenges that nobody has addressed, and that is how we control unsustainable fishing methods, and it may be that bottom draggers are one of those issues that will be most difficult to challenge. My question to the panel, or to the RCOM is, how does this issue get on the table and how do you address it by changing the methods of fishing if they're deemed to be unsustainable? What's the first action?

Ivan Lantz: The discussion of action planning didn't really get into concrete terms yet, but in the next couple of days you're going to hear about the different action plans that have started. The fishing sector has been developing an action plan. They're still in the early stages, but I want to acknowledge that work has begun on a sectoral basis. The other action plans that have come forward on spatial conservation planning, which we'll look at broadening out to look at marine spatial planning, and marine protected area network planning. Both address these kinds of issues, but through the lens of the ESSIM objectives as opposed to a specific question on gear type. At ESSIM that's been our approach so far, but this is the session where we want to hear about what other issues need to be addressed through action planning.

Kevin Squires: This refers to the challenges that we face in being involved in an integrated management process. In our case we don't have a lot of manpower to devote to this work and it's extra to the immediate things that we deal with as a fishery. I was involved in the early meetings developing the fisheries action plan and haven't stayed up to date. In our own organization, we've taken the opportunity to look at waste reduction, and try to use that as a starting point within our sector to talk about how we behave on the ocean. It's slow and it's a small step, but it is a starting point. We've starting to talk with our membership and our communities about how we improve, how we identify the adverse effects we have on the ocean environment as we conduct our operations, and how we minimize them. There's an educational and awareness-raising process that has to take place. It's not very fast, but we've started it.

3.0 CONCURRENT SESSIONS

The afternoon of Day 1 consisted of six concurrent sessions (see list below), covering a variety of topics. Summaries of each session follow.

1. Eastern Scotian Shelf Integrated Management (ESSIM) Plan Linkages with Sable Island Conservation and Management: An Exercise to Determine Future Actions
2. Perspectives on Integrated Coastal and Ocean Management
3. Implementation of an Information Network and Marine Cadastre in Support of Integrated Management
4. Resource Management Sustainable Development Framework: Advancing Ecosystem Approaches in the Management of Canada's Fisheries
5. Environmental Assessment and Integrated Management: Opportunities and Challenges for Coordination
6. Coastal Zone Management: Bringing ESSIM Ashore

Summary of Concurrent Session — Eastern Scotian Shelf Integrated Management (ESSIM) Plan Linkages with Sable Island Conservation and Management: An Exercise to Determine Future Actions

ESSIM Stakeholder Advisory Committee (SAC) Member Perspectives
Rick Welsford, Executive Director, Sable Island Preservation Trust

The Sable Island Preservation Trust assumed an administrative and conservation role for Sable Island in the mid-1990s, based on government funding. By 2004, funding had decreased and the Trust surrendered administrative control and responsibility was transferred back to government; however, the Trust maintained its conservation role. The Trust's Logical Framework Model from the 2007–2012 management plan includes activities related to a) education, outreach and capacity building, b) habitat restoration and enhancement, and c) research, monitoring and surveys. A GIS database is in preparation. It was noted that the advisory Sable Island Stakeholder Committee chaired by Coast Guard Maritimes Region is only focused on Island activities, not on adjacent activities in waters around Sable. The objectives and strategies in the ESSIM Plan related to the management and conservation of Sable Island were outlined.

Why does Nova Scotia care about Sable Island?
Pat Clahane, NS Justice Legal Counsel for the NS Dept of Intergovernmental Affairs

The presentation dealt with two issues: what interests does the Province bring to the table, and how do we coordinate and plan for the future. The provincial interdepartmental committee consists of representatives from the following departments: Tourism, Culture and Heritage, Environment, Fisheries and Aquaculture, Natural Resources, Energy and Intergovernmental Affairs. Nova Scotia has worked hard to understand the cumulative impact of Sable Island in the overall picture of its programs and

interest. Here are some of the perspectives the Province brings to the table:

NS Tourism, Culture and Heritage has numerous involvements. Sable Island is an ecologically unique area and a vital platform for natural history research. It is also the most concentrated area of recorded shipwrecks in Atlantic Canada. Research associates from the Nova Scotia Museum study Sable's human and natural history. The *Special Places Act* provides archaeological protection for the Island, both on the land and under the water. For the future, if feasible and environmentally responsible, there may be a study of the potential for some eco-tourism activities related to wildlife watching.

NS Environment works with a variety of partners to do air-shed monitoring on Sable Island. The program measures pollutant concentrations and trends, and enables comparisons with data from other ambient stations in NS and Canada.

NS Fisheries and Aquaculture supports the fishing industry's interest in developing an environmentally sustainable grey seal harvest in Nova Scotia. Sable Island is a unique part of Nova Scotia's coast and is considered in the development of the Province's new Coastal Management Framework.

NS Energy is concerned with potential oil and gas resources underneath Sable Island belonging to Nova Scotians. Recognizing the very special, environmentally sensitive nature of the island, limited oil and gas activity should still occur, but only in an environmentally responsible manner. Specifically, no drilling may occur on the island. It is important to be able to have non-intrusive, low impact seismic acquired on the island, and the location should continue to have capacity as an emergency refuge base when needed by the oil and gas workers. NS Energy is responsible for the special Nova Scotia role in overseeing 'fundamental' decision making for the 'Sable Island footprint area' set out in the Canada-Nova Scotia Offshore Petroleum Accord Implementation statutes.

NS Natural Resources addresses Sable Island as a biodiversity and culture treasure of global significance. Only a handful of places in Canada can match the Island in terms of its biodiversity and conservation value. The wild horses are a symbol of Sable Island and NS, unique and most widely known species on the island (Bill 227, *Provincial Horse Act*). There is a continued interest in a conservation strategy for the Island and importance of a human presence to conservation objectives for Sable Island.

The Province's plans for the future include a pending federal-provincial stewardship agreement, and engagement in federal National Wildlife Area designation and administration. We believe the current regulated human presence and activities on Sable Island support the environmental, economic and social interests of Nova Scotians and Canadians generally. We are committed to long-term measures for preservation of this unique part of this Province.

NWA Process on Sable Island
Kevin Davidson, Canadian Wildlife Service, Environment Canada

The unique ecology and cultural significance of Sable Island are well recognized by Canada's federal government. Sable Island has been, and is currently administered by the federal government through the *Canada Shipping Act* due to the historical significance of the Island and its navigational aids to mariners. The modernization of marine navigation has made traditional navigational aids such as those supported on Sable Island obsolete. As a result, the *Canada Shipping Act* has become a poor regulatory fit for administering and regulating activities on Sable Island and a more appropriate regulatory instrument has been sought. In consultation with the Province of Nova Scotia, a federal review has confirmed the importance of maintaining a human presence on Sable Island to the Island's conservation. The review also identified designation of Sable Island as a National Wildlife Area, administered by Environment Canada under the *Canada Wildlife Act*, as the most appropriate option to ensure the long-term conservation of Sable Island's natural and human heritage.

In support of this review, the federal government has committed to the maintenance of a human presence on Sable Island through funding and maintaining the Sable Island Meteorological Research Station. It has

also initiated a process and developed a prospectus on the designation of Sable Island as a National Wildlife Area. Once public, this prospectus will provide the basis for consulting with other federal and provincial regulatory agencies, industry, non-government interests, and the public in general on the identification of conservation objectives and the development of a management plan for the Island.

Background information was presented on Environment Canada's protected areas network, composed of 51 national wildlife areas (NWAs) and 92 migratory bird sanctuaries, at a size of ~12 million hectares. NWAs are created on federal lands through the *Canada Wildlife Act* (s. 4) for wildlife research, conservation and interpretation. As a starting point, no activities are allowed in NWAs, however, the Minister can issue permits for any activity that will not interfere with the conservation of wildlife. The emphasis of an NWA is on migratory birds, species at risk, other wildlife, rareness of habitat, and value to research and education. Sable Island, 290 km southeast of Halifax, is a migratory bird sanctuary administered by DFO's Coast Guard under the *Canada Shipping Act*; an Environment Canada meteorological station also functions as a DFO research station. Continued human presence is deemed integral to the Island's protection. A federal review of protection options selected the NWA as the preferred tool, eventually removing Sable Island from the *Canada Shipping Act*. Sable qualifies as an NWA due its migratory birds (Ipswich Sparrow, Roseate Tern, Piping Plover, Common and Arctic Terns), and other wild flora and fauna. A recent budget announced ~$200K annually for 4 years for NWA designation. A prospectus on the NWA is to be released in early 2009 pending provincial validation.

Stakeholder and public consultations on the management plan are to follow release of the prospectus. The management plan to be developed will describe regulatory measures to achieve management objectives and will establish a management regime. Regulatory changes to legislation are to include a seamless transition from Coast Guard to the Canada Wildlife Service. The short-term path forward will finalize discussion with Province of Nova Scotia, then release the prospectus, and initiate NWA consultations in 2009.

The Role of the Sable Island Station
Zoe Lucas, Green Horse Society

The Station was established in 1871 and is currently staffed year-round. The Meteorological Service of Canada became involved in atmospheric research in Sable, and new programs have been added over the years in addition to climate research. Atmospheric research programs are multinational in scope. The Station has become a multi-use base, and acts as a steward for the Island, a security base that provides infrastructure and lobbies support for programs. The scope of issues the Station deals with include sovereignty, security, the marine environment, and cultural and heritage aspects. The Station serves a broad community of interests and helps provide for a continuous human presence on the Island over 200 years. Sable Island also helps extend Canada's national maritime jurisdiction. Safety is provided to the offshore oil and gas industry with fuel storage facilities and two helicopter landing pads. The Island provides a base for extended search and rescue operations for fishing and cargo vessels. Canadian Wildlife Service has two ATV Gators on Sable for transportation. The fuel facility must be maintained for helicopters to refuel. The Station has assisted in investigations of drug smuggling and illegal immigration. Island infrastructure includes 15 buildings, plus tank farms and a satellite station, all contained in an enclosed area. Staff on the Island run all the various programs. If the Station is closed, it is unlikely that Canada could afford to replace it. The footprint of human activity has been reduced, despite the recent program expansion, and policies exist regarding the conduct of worker activities on the Island.

Sable Island conservation has not been in a vacuum; the Station has been an effective steward and knowledge exists on how to protect the Island. Terrain restoration projects are underway and garbage is offloaded to the mainland, recycled, composted or incinerated. Efforts are underway to reduce diesel consumption for energy generation (e.g., five wind turbines were installed in 2006, c. 400 metres from the Station). Energy efficient appliances have been replaced. Five percent bio-diesel is used for electricity generation. In summary, the atmospheric footprint has been reduced, continued human presence is important, and the Station has experience and capacity for programs and issues related to maintaining values for the marine environment, safety, security, education, culture and heritage.

Discussion

It was noted that Sable Island horses would not fall under the NWA protection as they are from domesticated stock. A one-mile, no-drilling exclusion zone is in effect, however, directional drilling to access petroleum reserves under the island would in theory be permitted. The Canadian *Constitution Act* refers to federal surface rights, while the Province of Nova Scotia claims subsurface rights to resources. It was noted that there is no common view on the offshore boundary of Sable Island, i.e., the Sable Footprint, given the shifting of the Island.

It was felt that the Sable Island Stakeholder Committee, the multistakeholder committee chaired by Coast Guard Maritimes Region, should be more engaged in the NWA process. The Committee is increasingly being used for information sharing rather than for seeking management advice. Clarification was sought on the role of the Sable Island Stakeholder Committee vis-à-vis the NWA Prospectus and process.

The proposed grey seal cull is a looming issue and the ethics of such activity was questioned. DFO Science has not objected to a proposed cull. Expressions of concerns from abroad and nationally could arise from a Canadian grey seal harvest on the Island, where the seal herd is protected. The Nova Scotia Department of Fisheries and Aquaculture has a stakeholder group interested in an environmentally responsible seal harvest, and according to NSDFA any harvest plans would have to accommodate environmental and moral issues.

It was noted that the Coast Guard has no expertise to determine who should or should not have access through CCG administration of public access.

Responses to the linkages between ESSIM objectives and Sable Island include the following comments:

Capacity at the Station is always limited. The cost of access ($5,000 per flight, $150 per day to stay) means that activity levels are usually low. In terms of ocean stewardship, there is proper disposal of waste oil and garbage. Good practices have been established for fuel containment. Research is costly to fully address the range of knowledge needs, and some needs are not apparent. Monitoring is effective and timely. Information is summarized in science literature and on web sites; meteorological data is regularly transmitted. Measures are in place to ensure a safe, healthy and secure environment. Safety standards and practices are good, but cannot afford to be diminished. The added safety role provided by Island infrastructure to adjacent industrial activities was noted. At-risk species are protected through the Migratory Bird Sanctuary. Invasive species are a contentious issue, even for the non-native horses, which some have suggested should be removed. Habitat integrity is being maintained and supported by ongoing efforts to reduce the human footprint, both on the ground and atmospherically. Overall, the ESSIM objectives are being achieved on Sable Island.

It was suggested that hydrological research would be useful to understand the size of the Island's freshwater lens, which is not well understood. Additional research could be undertaken on endemic beetles and moths. Biological and natural history studies on freshwater sponges, leeches and sticklebacks are being conducted by the NS Museum, but lots of research is still to be completed.

A question was raised about the accretion of sand from the Island and what mitigation measures would be required to counter sea-level rise. Could the Island disappear completely? It was questioned that if grey seals were not protected from a harvest, that horses might be considered a potential resource. On the sea-level rise issue, it was suggested that the Island could suffer extensive footprint losses from hurricanes that removed substantial vegetation, thereby exposing the Island to further subsidence. On the horse status issue, it was recalled that when Sable horses were declared surplus over 45 years ago, there was a national public outcry to Prime Minister Diefenbaker. Given that the Island has a higher profile than in the 1960s, it would be very difficult to implement any activity that negatively impacted the horse population. Also, the NS *Provincial Horse Act* is soon to become law, adding further support for protection of Sable horses.

Concern was expressed over the antagonism between non-governmental organizations when the potential existed for useful NGO collaboration to build a united constituency for the Island through annual public outreach events, etc. Zoe Lucas noted that the Sable Island Preservation Trust is almost entirely funded by Environment Canada, the Green Horse Society does not require or seek government funding, and that government funds should either be spent directly on the Sable Island Station, or used for a research fund to support competent individuals and organizations doing worthwhile, quality Sable Island projects.

It was noted that based on the discussion, Sable Island was the best managed real estate in the ESSIM area, and that the ESSIM Initiative ought to focus its attention elsewhere on other pressing marine environmental issues. Mark Butler of the Ecology Action Centre noted that the annual provision of public funds provided to Sable Island Preservation Trust is a poor or inappropriate use of public funding. The suggestion of a Research Fund to support researchers was recommended. The larger issue for Sable is considered to be the potential for a withdrawal in funding, and if that should happen there is no operational plan currently in place to deal with a budget shortfall.

A marine component of the NWA was discussed and it was proposed that this could build in protection measures for marine areas around the Island but others pointed out that Environment Canada has inadequate capacity to manage its existing commitments to protect wildlife in marine habitats.

Regarding the future management of the Island, the NWA initiative requires permanent funding. A qualified committee could be formed to review research proposals on a merit basis for the administration of all proposals. Money to support the Station is needed, and ESSIM could reinforce the importance and role of the Station in monitoring and ocean stewardship to protect, maintain and enhance the Island. Formal management of the Island should be migrated to Environment Canada's NWA as soon as possible. Coast Guard would still be involved on a cost-recovery basis with the annual re-supply. CCG is finishing year 2 of a 5-year program and we need to extend funding on a more permanent basis. In order to bolster political support, it was suggested to invite Megan Leslie (Halifax MP) and Leonard Preyra (Halifax Citadel-Sable Island MLA) out to Sable. Projects such as these might be supported cooperatively by the environmental NGOs and conservation organizations that have interests in Sable Island. The ESSIM Stakeholder Advisory Council (SAC) could explore means to support Environment Canada's NWA initiative. There may be a role for the ESSIM SAC to provide advice through the ESSIM Planning Office, and the SAC could be included in discussions on Sable Island. It was suggested that Sable Island be put on the agenda of a future ESSIM SAC meeting for discussion. Should the SAC have a discussion on Sable, it will be important to tie activities on the Island to what happens in the offshore. Given the limited resources in the ESSIM Initiative, it was recommended that ESSIM resources not all be spent on Sable Island.

Key Themes

1. The role of the ESSIM SAC could be important to support the Sable NWA.
2. The potential exists for further collaboration among environmental NGOs.
3. Long-term funding for the Sable Island Station is needed.
4. The Sable NWA initiative is widely supported.
5. A research review and management committee and process is needed.
6. The grey seal harvest issue is contentious and needs resolution.
7. ESSIM objectives are generally being achieved on Sable Island.

Recommended Actions

1. ESSIM Stakeholder Advisory Committee to discuss its role in Sable Island NWA process (*Lead: DFO ESSIM Planning Office*).
2. Local Halifax MP and MLA to be invited to Sable Island (*Lead: NGOs on Sable Island Stakeholder Committee*).
3. Sable Island research review and management committee and related process to be discussed (*Lead: Sable Island Stakeholder Committee; and for information: ESSIM SAC*).

Summary of Concurrent Session — Perspectives on Integrated Coastal and Ocean Management

Sharing the Marine Space: Marine Planning in Southwest New Brunswick/Bay of Fundy
Susan Farquharson, Chair, Marine Resources Plan Development Committee for Southwest New Brunswick/Bay of Fundy

There are many activities that occur within the Bay of Fundy. Often overlapping and competing for ocean space. The intent of the initiative is to develop a marine plan for the area. Expected benefits for the development and implementation of the marine plan include: greater certainty for development; improved access to and sharing of information and data; improved service delivery of government programs; and reduced marine space conflicts.

The initiative began in 2004 in response to conflicts among the fisheries and aquaculture industries. Phase I of the initiative (2004-06) was focused on forming a planning committee and identifying a planning process. The planning committee is made up of 28 stakeholders and is chaired by Fisheries and Oceans Maritimes and New Brunswick Department of Agriculture, Fisheries and Aquaculture.

During Phase II of the project a new steering committee was established and formed part of the planning team. The steering committee has 12 members and a chairperson. The other components of the planning team consist of the government secretariat and the technical working group.

The plan process consists of: 1) defining the purpose, including guiding principles, goals, and objectives; 2) defining the scope, including plan vision and issue identification; 3) defining the needs and outcomes; and 4) developing the plan.

The plan: The Preferred Future of the Bay is a strategic plan meant to influence all plans and activities in the planning area. It sets out 23 objectives, 26 strategic actions and 5 recommendations related to the planning goals. The plan also outlines six priority areas: management, access, healthy communities, sustainable livelihoods, research and monitoring, protection and prevention. The committee has signed off on the plan and the next step is government review.

Integrated planning processes take time. It is important to engage the community early on and throughout the process. It also important to hold intergovernmental discussions early and to time, resources and expertise committed to the project. In order to continue to move forward with the initiative a provincial coastal strategy is necessary. Along with inter/intra governmental agreements, commitments and resources. Momentum needs to continue by building on what has been accomplished and recording the real benefits of marine planning.

The Massachusetts Ocean Management Plan
Prassede Vella, Ocean Management Analyst, Massachusetts Office of Coastal Zone Management

Throughout the history of Massachusetts, coastal and ocean waters have played a significant role for fishing, shipping, trade, recreation and scientific research as a result of the rich variety of marine ecosystem resources. Increasing demands made by a growing population have expanded the traditional use of the ocean to aquaculture, artificial reefs, high-speed ferries, laying of cables and pipelines, resulting in increasing competition for space as well as increasing conflict. Other potential emerging uses aim to address issues of climate change and sea-level rise, including production of renewable energy and extraction of offshore sand for beach nourishment.

In response to the demand for integrated marine planning, an Ocean Management Initiative was established in 2003 to pave the way for integrated multi-use ocean management. In 2006, the Massachusetts Ocean Partnership, a non-governmental collaboration of stakeholders, was formed to advance integrated multi-use ocean management. The Massachusetts office of coastal zone management has undertaken extensive work in support of integrated multi-use ocean management. This

work includes seafloor mapping, habitat classification feasibilities studies, coastal and ocean economic assessments, evaluation of offshore energy potential and a federal consistency review.

In 2008, Massachusetts passed the *Oceans Act* which directs the Secretary of EEA to develop an integrated ocean management plan by December 2009. The Act also outlines principles guiding the development of the IM plan that will include a spatial component with defined management measures. The framework plan is aimed to be flexible and allow for evolution and should identify appropriate locations and performance standards for protection and uses.

The first phase of the planning process focuses on developing a baseline assessment of the current state of the marine environment in Massachusetts and holding an intensive public consultation process. The second phase involves developing a working draft plan, followed by a review period during the third phase. The fourth phase is designed around formal public hearings, legislative review and promulgation of the final plan.

The Beaufort Sea Integrates Ocean Management Planning Process
Adrienne Paylor, Integrated Management Coordinator, DFO Central and Arctic

The Beaufort Sea is one of five priority Large Ocean Management Areas (LOMA) in Canada. The goal for each LOMA is to develop a collaborative governance structure to promote effective decision-making. In the Beaufort Sea the Inuvialuit Final Agreement (IFA) set the framework for the planning in the Beaufort Sea LOMA. The Inuvialuit are Inuit people who live in the western Canadian Arctic region. The IFA establishes the Inuvialuit Settlement Region. Within the region there are many ocean activities taking place; fishing and hunting, oil and gas development, shipping and tourism. There is also a focus on integrated oceans planning and marine protected areas.

Integrated Oceans Management (IOM) aims to coordinate the oceans mandates of various government departments, provide a mechanism to be proactive and share information. The governance structure for IOM consists of the Beaufort Sea Partnership (BSP) and the Regional Coordination Committee (RCC), both of which are supported by working groups. The BSP is the stakeholder structure that allows stakeholders to provide input into the process. The RCC is the senior group responsible for decision-making, direction and ensuring the development of the IOM Plan. The development of an IOM Plan will provide long-term direction, common goals and objectives for the area. It will also combine environmental, social, cultural and economic sustainability together in one plan.

As background to the development of an IOM Plan the Beaufort Sea initiative has completed an Ecological Overview and Assessment Report, along with a Social, Cultural and Economic Overview and Assessment Report. Working groups have been established to consider various aspects of the plan. The Social, Cultural and Economic Working Group develops baseline information and identifies Social, Cultural and Economic objectives, indicators and develops monitoring protocols. The Traditional Knowledge Working Group compiles and develops a framework for incorporating oceans and marine related traditional knowledge. The Biophysical Working Group documents biophysical baseline conditions, identifies ecologically and biologically significant areas, and develops conservation objectives. The Geographic Information Working Group consolidates baseline information and identifies and develops tools that can be used to collect, maintain and monitor information.

The IOM Plan will contain a vision, goals, objectives and indicators. It will also identify timelines, accountability and a process for implementation and evaluation. Implementation will occur through existing mandates and a series of partner specific workplans.

Challenges to an IOM process include keeping the momentum going and partners engaged, communicating clearly on complex issues, and also coordinating with complementary initiatives.

Placentia Bay Grand Banks Large Ocean Management Area
Sigrid Kuehnemund, Section Head, Integrated Management, DFO Newfoundland and Labrador

The Placentia Bay Grand Banks (PBGB) Large Ocean Management Area (LOMA) is one of Fisheries and Oceans Canada's (DFO) five priority areas for integrated management in Canada.
There are different scales of Integrated Management occurring within the LOMA; nested within are two Coastal Management Areas (CMAs): Placentia Bay and Coast of Bays. In the Newfoundland and Labrador Region, a governance structure is in place to address issues related to the LOMA and other oceans issues. A number of interrelated committees make up this structure, including the Regional Oversight Committee, the Canada-Newfoundland and Labrador Committee on Oceans Management, the PBGB LOMA Committee, CMA Committees and MPA Committees. The LOMA Committee represents all ocean sectors, including key government, stakeholder and non-governmental groups with a responsibility or interest in the management of coastal and oceans activities in the PBGB LOMA.

In terms of work completed to date, ecologically and biologically significant areas as well as 94 conservation objectives have been identified for the area. Continuing work will include prioritizing the conservation objectives and identifying and assessing risks. A Social, Cultural and Economic Overview Report has also been prepared and work to develop social, cultural and economic objectives is ongoing. All of this will form the foundation of the Integrated Management Plan.

The stakeholder PBGB LOMA committee has met twice since its formation. Meetings were focused on developing a terms of reference, discussing the conservation objectives and developing an outline for the Integrated Management (IM) Plan.

Next steps for the PBGB LOMA include continued risk assessment related to conservation objectives to identify management actions; identification of an Area of Interest (AOI) for a Marine Protected Area (MPA); formation of a Social, Cultural and Economic Working Group to develop social, cultural and economic objectives; and formation of an Integrated Management Plan Working Group to develop the IM Plan.

Discussion

Following the presentations, panellists responded to questions from the floor. Concerns were expressed over the long timelines associated with integrated management planning and a question of if there was a way to shorten these timelines. Panellists responded by saying that groups needed to feel that they have ownership of the process and that this takes time to develop. Most processes are consensus based and time is required to reach consensus on difficult issues. Panellists indicated that momentum can be kept high by focusing on small successes. Following on the same point, concerns were also expressed over the opportunities for action that are delayed as a result of the lengthy planning process and are there ways for integrated management planning to influence decision making now. Panellists indicated that there is value in bringing decision makers and stakeholders together to exchange information and discuss issues. Integrated management currently provides a forum for discussion and a venue for resolving immediate issues indicating that small changes are resulting.

A final question dealt with the development of objectives in an IM process. In many of the cases conservation objectives for an area were developed prior to the development of social, cultural and economic objectives and it was indicated that perhaps it should be the other way around. Panellists responded by indicated that the IM plan was the place where the two sets of objectives would come together and conservation objectives would be viewed in recognition of the social, cultural and economic objectives.

Summary of Concurrent Session — Implementation of an Information Network and Marine Cadastre in Support of Integrated Management

COINAtlantic: An Initiative of the Atlantic Coastal Zone Information Steering Committee (ACZISC)
Paul Boudreau, ACZISC Secretariat

COINAtlantic is a network of people working together. It is attempting to address the problem of geographical information sharing in Atlantic Canada, and to provide knowledge to support integrated management. Right now, there are many portals that provide geographic data in the region, but discovering the range of data, how to access and use it is not easy, especially for non-GIS experts. They are starting with 6 data sources; the Nova Scotia coastal series, NRCan Earth Science, DFO Human Use Atlas, DFO trawl survey, CHS bathymetric grid, DFO oceanographic models. COINAtlantic will put these online in an integrated way and is developing a user-friendly application to allow users to find and use all of the datasets. Their User Interface is based on the GeoConnections Discovery Portal. A demo is available now at coinatlantic.ca, and has a Google-type search utility to help users find the data they need. They are really looking for feedback: is what you need there? Does the interface work well? They are also interested in what datasets are 'gems' particularly useful, maybe under-used geographic information data from Atlantic Canada.

Administration of Marine Space: A Marine Cadastre Prototype for COINAtlantic
Sue Nichois, University of New Brunswick

Marine cadastre describes the rights and interests that people have along the coast: essentially parcels of land in the water. Examples include: public access rights, navigation rights, fishing rights, riparian rights, mineral rights, development rights. There are often multiple co-existing rights to the same marine area, and many have fuzzy boundaries. For example, when DFO began working on the Musquash Marine Protected Area, there were many traditional users and people with interests, such as fishers or recreational users, who didn't show up in the land registry. Unlike on land, marine cadastre is new everywhere, but some jurisdictions have started to describe this formally. The pilot area is Chedabucto Bay. This was chosen because it's in ESSIM, it is an interesting coastal area, many uses have been identified in the DFO Atlas of Human Activities, DFO and others have good relationships with community groups, and because there are multiple uses and potential conflicts. COINAtlantic is also interested in data for this project and in feedback.

Discussion

In the question and answer session, it was discussed that social and economic data would be a good complement to the datasets described. COINAtlantic is open to trying to locate and add some of these datasets. There was some discussion about using the ACZISC connections to help with identifying and accessing data. Other topics were how to include more First Nations interests and representation in the project, and how to use COINAtlantic and Google Earth together.

Getting in touch:
Email: COINAtlantic@dal.ca, http://COINAtlantic.ca,
FaceBook group: search COINAtlantic (can post questions and answers)

Summary of Concurrent Session — Resource Management Sustainable Development Framework: Advancing Ecosystem Approaches in the Management of Canada's Fisheries
Marc Clemens, Fisheries and Aquaculture Management, DFO National Capital Region
Chris Annand, Fisheries and Aquaculture Management, DFO Maritimes Region

This session included a presentation on Fisheries and Oceans Canada's *Resource Management Sustainable Development Framework*. The presentation and discussion provided information on the key

policies and components of the Framework, and highlighted current work to advance ecosystem approaches to fisheries management both nationally and regionally.

Fisheries management is becoming more complex, as we move away from single species management and toward broader ecosystem-based management. The existing *Fisheries Act* provides little specific guidance for this new approach to fisheries management, which is why we need a strong policy framework to pull together various tools and policies to respond to domestic and international commitments to sustainable development and the ecosystem approach. The framework includes existing tools and policies, while others will be developed and added as required along the way. They will include conservation elements, economic elements, and also shared stewardship elements.

An ecosystem approach to management (EAM) takes into account impacts of fisheries on all aspects of the ecosystem (not just the targeted species), as well as impacts of the ecosystem on fisheries (e.g., climate change, water quality, etc). Managing impacts on the ecosystem will include managing for productivity, biodiversity, and habitat. Tools and policies under this framework for managing productivity include a fishery decision making framework incorporating the precautionary approach, a policy to guide fisheries for forage species, as well as a to-be-developed policy for considering the role of top predators. Managing for biodiversity includes the continuing protection of species at risk through the *Species at Risk Act* and other tools, a policy that will be developed for the management of bycatch, and another future policy addressing the impacts of lost fishing gear. Tools and policies to manage impacts of fisheries on habitat include a Sensitive Benthic Areas Policy and the development of a companion a risk assessment model for fishing activities to use when applying the policy.

Implementing these tools and policies will occur with the cooperation and stewardship of stakeholders through the Integrated Fisheries Management Plan (IFMP) process for each fishery. IFMPs are developed through fishery advisory committees. A newly-developed IFMP template will ensure the inclusion of information such as biological and socio-economic information about the fishery as it relates to harvest decision-making, a variety of short- and long-term objectives for the fishery, planned management measures to be taken for upcoming seasons, information on access and allocation, shared stewardship arrangements, a compliance plan, and criteria for performance evaluation. This new template will facilitate progress toward incorporating ecosystem and integrated management objectives, as well as improved transparency in decision making.

The implementation of the different policies under the Resource Management Sustainable Development Framework will be done in a phased manner, over time, based on priorities established at the regional and national level. The operationalization of these tools and policies will not happen all at once, and progress will be made more quickly in some fisheries than in others. DFO will be monitoring progress and results through regular IFMP performance reviews, as well as a new fisheries checklist. This checklist is a DFO self-assessment tool that will help to identify gaps and priorities, evaluate performance, and promote consistency across fisheries and regions.

In January 2009, the aim is to post information on the framework and the final versions of the newest policies (i.e., Precautionary Approach framework, Sensitive Benthic Area policy and the Forage Species policy) on the DFO website. It is expected that the framework will evolve over time as implementation of these tools and policies progresses, adjustments are made, and new tools and policies are added as required.

In the Maritimes, we are also moving ahead with a regionally-developed ecosystem approach to management of fisheries. This approach consists of a 3-step process: 1) identify and prioritize pressures affecting productivity, habitat, and biodiversity; 2) develop strategies and establish reference points for these pressures; and 3) identify management tactics to keep pressures within the references that have been set. This approach will be implemented in a step-by-step evolutionary manner as new IFMPs are developed using existing management processes. Two pilots will be identified in 2009 for incorporating additional levels of integration in fisheries management to take into account the cumulative effects of multiple users. We are working to explicitly connect this management approach to the ESSIM objectives through a fishing industry ESSIM Action Plan, as well as ensuring consistency with the Resource

Management Sustainable Development Framework. All of these elements will be addressed and implemented through the IFMPs for each fishery, which will be publicly available documents.

Summary of Concurrent Session — Environmental Assessment and Integrated Management: Opportunities and Challenges for Coordination

Integrated Management and Oceans Governance, Current and Future Direction in Canada
Penny Doherty, Oceans Directorate, DFO National Capital Region

Integrated management (IM) is a collaborative management process that recognizes the shared responsibility of stakeholders and regulators to support both marine environmental protection and sustainable economic development. It respects the jurisdiction and legislative mandate of regulators and considers the relationships among different ocean interests, and also between marine users and the environment. Canada's *Oceans Act* provides the legal basis for IM in Canada. The Act is supported by Canada's Oceans Strategy, Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Marine Environments in Canada, and the Oceans Action Plan. IM is being undertaken in five pilot Large Ocean Management Areas (LOMAs) across Canada. Notwithstanding the pilot approach, the guidance from the *Oceans Act* is for all marine, estuarine and coastal areas to have IM plans, thus this is the future direction for IM in Canada. The focus in the next few years will be on making IM practical, including tools development (e.g., Pathways of Effects models to identify potential cumulative effects; Social, Economic, and Cultural Overviews and Assessments; risk assessment tools, etc.).

Advancing linkages between IM and Environmental Assessment (EA) is also a priority. Both IM and EA strive to improve development planning, management and decision-making and have a goal of environmental protection and sustainable development. IM and Regional EA (REA) are strategic planning processes that examine ecological, socio-economic and cumulative effects, identify desirable future conditions, and use adaptive management. IM objectives are achieved through existing regulatory processes, and EA is a major regulatory and decision-making process.

There are advantages of linking IM and EA/REA. IM multi-stakeholder governance structures may provide a forum for coordinated consultation on EAs. With a regional approach, attributes of IM (common strategies, vision) can be better integrated with EA and can ensure that REA outputs contribute to Canada's Oceans Strategy. IM plans may provide guidance to EA proponents, and reduced time and cost burden to undertaking EA. Linking IM and EA/REA may facilitate the coordination of resources between stakeholders and governments. Pilot REA initiatives may provide lessons for refining and integrating REAs into policy and planning strategies for IM, and may move us forward on addressing cumulative effects.

There are also disadvantages and challenges to linking IM and EA/REA. LOMAs and IM plans have no regulatory or decision-making authority and there is uncertainty as to whether the *Canadian Environmental Assessment Act* recognizes IM plans. IM implemented on a regional scale may be incompatible with the project-specific nature of EA and the sufficiency of a LOMA-based analysis for an REA will have to be evaluated. IM may not be advanced far enough to address EA needs at the moment. Currently no mechanism exists within the Eastern Scotian Shelf Integrated Management initiative to coordinate with EA/REA, particularly for proposed developments of different scales, complexity and nature.

Overall it is important to align regulatory processes such as EA in LOMAs to achieve IM objectives. Coordination has mutual benefits: adopting REA is an opportunity to meet IM commitments and address cumulative effects, and IM provides a vision and objectives that may help guide EA/REA and provide opportunities to improve efficiencies.

Environmental Assessment and Integrated Management
Derek McDonald, Canadian Environmental Assessment Agency

The current approach to Federal Environmental Assessment consists of two tiers: policy, plan and program assessment or Strategic Environmental Assessment (SEA) (Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals); and project assessment (*Canadian Environmental Assessment Act* (CEAA)). The SEA cabinet directive is policy, plan and program focused, is flexible and adaptable, applies a self-assessment model and is qualitative or semi-quantitative. CEAA is project focused, is linked to federal decision making, has limited ability to consider the big picture, and allows for consideration of regional studies.

Improvements are continuing to be made on both the cabinet directive and CEAA. A multi-stakeholder committee is exploring means of improving SEA and the Canadian Council of Ministers of the Environment is working toward a common national understanding of regional SEA. There will also be a legislative review of CEAA led by a parliamentary committee.

Potential benefits of a regional scale environmental assessment it provides a stronger foundation for cumulative effects assessment; a better forum to debate broader policy issues; and is more streamlined, yet better informed.

There are also many benefits and challenges to linking Environmental Assessment (EA) and Integrated Management (IM). IM can provide a big picture tool to EA. It can provide the context for development and establish long-term priorities and goals, based on input from broad range of interests. It would be important to define roles and the relationship between EA and IM and to ensure that all interested parties have the opportunity and resources to participate.

Integrated Management on the Land
Fred Wendt, Halifax Regional Municipality

The presentation outlined some of the principles, methodologies, and tools that Halifax Regional Municipality planners use to manage land-based resources in the Region. To begin, there are two general principles behind land-based planning. The first principle is integration; recognition that the realm and surroundings are influenced by a wide variety of factors and, if any piece is taken out of the picture, you don't get the result you are looking for. The second principle is strategic planning. This means that in order to reach a goal one needs to think through in advance all the steps involved, whether there are any road blocks ahead, and how these can be overcome. Backcasting is a term that has recently come into the planning vocabulary, and requires the planner to articulate the end result and determine how to get there. Since planning also happens to be a political discipline, one needs to know the best time to implement a planning solution.

Any planning process can be broken down into four basic steps. First, establish the vision or goal. Second, explore all available options to achieve that vision or goal. Third, once the chosen direction or strategy has been decided you need to ensure that it gets implemented. Last, once a solution is implemented its progress needs to be monitored. Planners use a number of tools in their work, with an important tool being stakeholder involvement and conflict resolution. Traditionally, to achieve goals of reduced conflicts between different uses planning practice relied heavily on separating incompatible uses. As the economy developed from primary production to a service economy, it has been found that it is not so much the use taking place on a property that bothers individuals rather the way in which that activity takes place. Looking at buildings for example, in some circumstances it is the impact that a building has on the neighbourhood and not the activity that is carried out inside of it. An office that looks like the residences on a street might not be very obtrusive.

Getting more sophisticated and flexible in the regulatory tools allows planners to achieve other goals like creating a more vibrant community. A municipality can also use incentives - financial or otherwise - to achieve its goals by rewarding those who help implement the Plan. Another tool a planner uses is density

bonusing, which allows the municipality to offer an additional development opportunity in exchange for the developer providing some public good like affordable housing or park land. Finally, how does this relate to management of ocean resources? There are of course differences in jurisdiction, legislation, and the fact that "residents" aren't as vocal in the ocean as they are on land, but there are also very important similarities. For instance, managing resources usually means there are competing interests for those same resources. As well, many disciplines are involved, whether biology, sociology, or politics, in other words the process must be integrated. Coming full circle, there is value in consulting land-based planners, as a consideration is given to marine planning in the ocean.

Additional Panelists: ***Susanna Fuller, Ecology Action Centre; Ted Potter, Environmental Assessment and Major Projects, DFO; Bruce Cameron, NS Dept. of Energy***

The presenters provided an overview of integrated management and environmental assessment in Canada and the basic principles and methods of land use planning. The presenters and panellists agreed that coordination of EA and IM would enhance both. As well, we can learn from land use planning as we move towards marine planning and integrating IM and EA. The panellists commented on the linkages between EA and IM, opportunities and challenges for linking the processes, and potential positive and negative aspects of linking them.

There are several advantages of linking integrated management with environmental assessment:

- IM has multi-stakeholder agreement on objectives which could be used to assist decision-making for EA.
- Proponents and decision-makers could use IM plans as guidance for EA.
- IM has a mechanism for information exchange.
- Reports developed for the purposes of IM could be (and are) used in EA.
- IM establishes long-term priorities and goals and provides a context for evaluating development proposals.
- Both EA and IM have the goal of supporting economic development and environmental conservation.

Although there are advantages of linking the two processes, there are also challenges:
IM takes a long time and there may be a need to respond to developments or new industries before the IM body is prepared to do so.
Does the legislative or policy framework exist to link the two processes? Are roles and relationships between the different processes clear? (e.g., EA, regional environmental assessment (REA), strategic environmental assessment (SEA), IM?)
Do all interested parties have the capacity to participate? Some parties may only be able to participate in one or the other.
How will you determine which steps in EA or IM need to be done separately and which are unnecessary overlap or duplication?
How will either process deal with cumulative effects? This is challenge for both processes.

One of the panellists pointed out that EA is often seen as a checkmark; often neither the proponent nor ENGOs are happy with the process. EA often does not deal well with cumulative effects. If IM planned where activities could or could not occur, it would be useful for everyone.

CEAA is up for review in 2010. There is an opportunity to use ESSIM, as a multi-stakeholder forum, to provide input to the CEAA review. It was also suggested that ESSIM could be used to provide feedback on individual EAs. However, there is a need to bring ESSIM ashore for this to work well, as many EAs are for coastal areas.

The principles and approaches for IM are equally applicable for EA. The linkages between the two will be crucial as we move forward. IM is a longer process than SEA or REAs. These types of EAs could feed into the IM process. For example, the SEA for Bay of Fundy tidal power could be a starting point for IM in that area.

Summary of Concurrent Session — Coastal Zone Management: Bringing ESSIM Ashore

Coastal Management in St. Margaret's Bay - Community Perspective
Geoff LeBoutillier, St. Margaret's Bay Stewardship Association

Life in St. Margaret's Bay, once great, is now in decline. Management and development of the coastal zone involves 13 government agencies, but with little communication there is confusion and lack of reasonable governance and integrated management. There is a need for integration between municipal, provincial and federal governments. It is important to realize that the inshore effects the offshore.

Alexi Baccardax, Dalhousie University / St. Margaret's Bay Stewardship Association

Along the St. Margaret's Bay coast current research is focused on land use planning in the context of sea level rise. There is also research focusing on incorporation of the concerns of primary stakeholders into planning and management of the coast. Primary stakeholders are directly affected by what happens on the coast. Alexi's thesis suggests two possible ways that stakeholder concerns could be incorporated into management decisions: 1.) Possible Coastal development advisory boards for each management area. Similar to the ESSIM SAC. Would oversee all development in that area. 2.) Community Coalitions of Primary Stakeholder Groups– each management area has a board and stakeholder groups would remain separate from government.

Bras d'Or lakes Collaborative Environmental Planning Initiative (CEPI): Lessons learned for CZM
Jason Naug, Oceans and Coastal Management Division, DFO Maritimes Region

The Bras d'Or Lakes are unique lakes and a watershed system comprised of estuary, complex shoreline, shallow bays and deep canyons. The lakes can be susceptible to human disturbance due to limited connections to ocean and limited flushing.

The main issues affecting the lakes include, declining fish stocks, land-based sewage, erosion and siltation, forestry, and invasive species. To address these issues a management plan was needed.

The Collaborative Environmental Planning Initiative (CEPI) was created to develop a management plan for the Bras d'Or Lakes. The CEPI model demonstrated commitment from 17 departments/agencies from all levels of government and was governed by a Senior Council, that meets annually and is made up of federal, provincial and municipal government representatives and First Nations Chiefs; and a Steering Committee, that meets monthly and is made up of NGOs, industry and government.

CEPI created 12 sub-watershed plans to deal with local issues, maintain manageable sized projects, and encourage community involvement. Work that has been done to date includes the development of an ecosystem overview and assessment report, a Traditional ecological knowledge workshop and a State of the Bras d'Or report is underway. There is also a development standards project underway which consists of the creation of toolbox for land use planning for municipalities to adopt as guidelines.

Many lessons have been learned throughout the CEPI process. It is important to work at different geographic scales – broad (regulation change) and site specific (remediation); there is a need to focus on specific root causes of issues (environmental drivers); it is important to have buy-in from all levels of government and to have an organizational structure to deal with this, and Coastal Management Areas are capacity and resource intense. The Bras d'Or example is largely seen as pilot exercise. There is a need to explore the linkages between ESSIM and the coast.

Coastal Management in Nova Scotia: Provincial Perspective
Sean Weseloh McKeane, Provincial Ocean Network (PON), Nova Scotia Department of Fisheries and Aquaculture (NSDFA)

Coastal management is a publicly stated priority for government and a high profile public issue. The Nova Scotia Department of Fisheries and Aquaculture (NSDFA) provides Provincial coordination and leadership for integrated coastal and ocean management. NSDFA chairs and coordinates the Provincial Ocean Network (PON), which consists of 12 departments with coastal mandates and interests. PON is responsible for coordination of information and policy on coastal and ocean management issues within the Government of Nova Scotia. Under NSDFA, Provincial government has developed and adopted a coastal management framework and is working on sustainable coastal development strategy.

The coastal management framework identifies six priority issues: sea-level rise and coastal storm events; coastal development; public coastal access; working waterfronts including lighthouses; sensitive coastal ecosystems and habitats; and, coastal water quality.

Overall vision of the coastal management framework is a healthy, safe and vibrant coast that allows for the highest quality of life. The Framework identifies priority coastal issues and provides a clear focus for Provincial government.

The Sustainable Coastal Development Strategy will identify a suite of options to achieve sustainable development by 2020. A "State of the Coast Report" will be developed by March 2009. This will examine at land-based and near-shore activities and trends with an aim of identifying gaps in information, legislation and regulation. The Report will link with other Provincial strategies (natural resources management strategy which includes forestry and mineral resource management, biodiversity and provincial parks; and the provincial water resource management strategy). Following the development of the Report there will be a public engagement process in Spring/Summer 2009. NSDFA will be seeking feedback on current state of coastal areas and resource and looking to understand public priorities for coastal management. This will lead to the development of the Sustainable Coastal Development Strategy.

Challenges of Integrated Management Coastal Management include shared accountability, high level goals vs. local reality (i.e., ESSIM goals must connect with local goals) and achieving a balance of the two. There are also opportunities for Integrated Management to use on the ground knowledge and provide opportunities for local leadership.

Municipal Perspectives on Integrated Coastal Management
John Charles, Planner, Real property Management, Infrastructure and Asset Management, Halifax Regional Municipality (HRM)

This presentation provided an overview of research Mr. Charles conducted on integrated coastal management for Halifax Regional Municipality (HRM) as part of his Masters thesis, 2005 Dalhousie University (Urban and Regional Planning).

Municipal governments have a role to play in Integrated Coastal Management, although have limited jurisdiction on coastal zone. Currently, there are no national, provincial or municipal Integrated Coastal Management programs within HRM. However, the HRM Regional Plan will incorporate coastal planning. The issue driving this is that land based development in HRM is harming coastal waters. Canada's *Oceans Act* provides an opportunity for municipal involvement in Integrated Coastal Management (ICM).

Currently, municipalities and the Federal government operate separately. HRM does watershed work and DFO monitors the ocean. Working collaboratively would fill knowledge gaps and increase the likelihood of ICM success. His thesis provides six recommendations for HRM and DFO to advance ICM cooperatively:

- There is a need multi-year funding and for governments to be fully on board
- HRM and DFO senior management should examine ICM issues – high level exchange of ideas
- DFO should take part in HRM regional plan implementation

- HRM should involve DFO in monitoring
- HRM and DFO should conduct a St. Margaret's Bay ICM pilot study
- Cooperate with NSDEL and DFO to create a formal referral system for municipal development projects.

4.0 MARINE SPATIAL PLANNING

Mike Murphy welcomed participants to the second day of the workshop and reminded everyone they were assigned tables for multistakeholder discussions during most of the day. Bruce Smith was introduced to recap the presentations and concurrent sessions from Day 1, however, as those were summarized above they are not repeated here.

Ivan Lantz then introduced Charles Ehler and Fanny Douvere, internationally recognized experts on integrated ocean management, particularly marine spatial planning and management, currently working as consultants to the United Nations Educational, Scientific and Cultural Organization (UNESCO) where they are completing international guidelines for ecosystem-based marine spatial management.

KEYNOTE ADDRESSES

Charles Ehler

Charles Ehler's keynote address was titled "Marine Spatial Management: An Idea Whose Time Has Come." He outlined the work of IOC/UNESCO to develop guidelines for marine resource managers to implement ecosystem-based marine spatial management, document good marine spatial management practices around the world, fine-tune the guidelines in two marine places, develop a practitioner-focused marine spatial management website for outreach to the international community, and organize an international community of marine spatial management experts. In emphasizing the importance of marine geography, it was stated that the oceans are not homogeneous, some areas are more important than others, some things only happen in certain spaces at certain times, and effective management should address this spatial and temporal heterogeneity. The ocean includes both ecologically and economically important areas, for example:

Ecologically important areas:
- Areas of High Biodiversity
- Areas of High Endemism
- Areas of High Productivity
- Spawning Areas
- Nursery Areas
- Migration Stopover Points

Economically important areas:
- Oil & Gas Deposits
- Sand & Gravel Deposits
- Fishing Grounds
- Transportation Routes
- Areas of Sustained Winds
- Areas of Sustained Waves

Mapping is important to record and store information, convey information and findings visually that are difficult to express verbally, recognize spatial distributions and relationships (compatibilities and conflicts) of human activities and nature, and visualize and conceptualize patterns and processes that operate in space and time. Marine spatial management is being advocated globally for a number of reasons. It is a continuous, iterative, and adaptive process. It is comprised of related elements, all of which must be carried out to achieve goals and objectives. It is a matter of political and social choice – stakeholder

involvement and support is critical for sustaining management. It should be able to finance on a continuing basis the recurrent and investment costs that are necessary.

Key characteristics of marine spatial management are that it is integrated across sectors and agencies; place-based or area-based planning; an adaptive process, not a one-time plan; strategic and focused on the long-term; participatory with stakeholders involved in process; and balanced, both for development and conservation. An ecosystem-based approach to marine spatial management emphasizes protection of ecosystem structure, functioning and key processes; it ensures interconnectedness within and among systems (air, land and sea); it integrates ecological, social, economic, and institutional perspectives; and it is place-based or area-based, focusing on specific ecosystems.

The benefits of marine spatial management include economic and environmental aspects. The economic benefits are: a) it provides greater certainty to the private sector when it plans new investments, b) it identifies areas of compatible uses for development, c) it reduces conflicts among incompatible uses and between uses and nature, d) it streamlines permitting, and e) it promotes efficient use of resources and space and reduces cumulative impact on the marine environment. The environmental benefits are: a) it identifies areas of biological or ecological importance and reduces risk of conflict with development; b) it enables biodiversity objectives to be at the heart of marine spatial planning and management; c) it ensures space for biodiversity and nature conservation; and d) it provides context for networks of marine protected areas. Marine spatial management is not about spatial planning for single sectors, or a substitute for single-sector planning, or a one-time plan, or planning a network of marine protected areas, or ocean zoning.

We already have zoning in the ocean. However, we zone the ocean on a single-sector basis without any integrated planning. Examples of existing zoning include:

MARINE TRANSPORTATION
- Vessel Traffic Routes
- Vessel Traffic Separation Zones & Precautionary Zones
- Areas To Be Avoided (by vessels)
- Particularly Sensitive Sea Areas (PSSAs)
- Safety Zones around Vessels and Terminals
- Anchoring & No-Anchoring Areas
- Security Zones in Ports and Waterways

OFFSHORE ENERGY
- Oil & Gas Lease or Concession Areas
- Wind Farm and Wave Park Lease or Concession Areas
- Safety Zones around Oil & Gas Installations, Wind Farms, Wave Parks, etc.

MILITARY OPERATIONS
- Military Operations or Exercise Zones

DREDGING
- Dredging Sites or Areas
- Dredged Material Disposal Areas or Zones

PIPELINES & CABLES
- Oil & Gas Pipeline Rights of Way
- Submarine Communications Cable Rights of Way
- Energy Transmission Line Rights of Way

MARINE MINING
- Sand & Gravel (Aggregate) Extraction Areas

FISHING
- Fishery Closure Areas, including seasonal closures
- No Trawl Areas
- Critical Habitat Designations

OFFSHORE AQUACULTURE
- Offshore Aquaculture Areas

MARINE PROTECTED AREAS

- Marine Sanctuaries, Reserves, Parks
- Protected Archeological Areas, e.g., Ship Wrecks
- Cultural or Religious Areas

SCIENTIFIC ACTIVITIES

- Scientific Reference Areas, Monitoring Areas

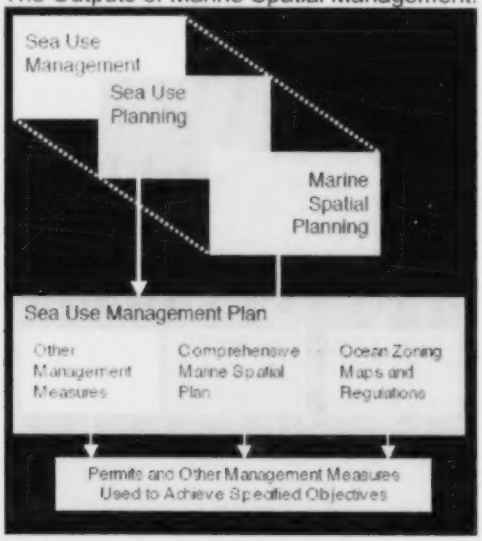
Marine spatial management is defined as the process of analyzing and allocating parts of three-dimensional marine spaces (ecosystems) to specific uses or objectives, to achieve ecological, economic, and social results that are usually specified through a political process.

It was noted that there are two ways to manage marine spaces: 1) Incrementally – managing one economic sector at a time, allocating uses without regard to other uses and allocating uses without regard to nature; or 2) Integrated – managing across economic sectors, agencies, and among levels of government, allocating uses considering other uses, and allocating uses considering the needs of nature for certain places.

It is time to consider marine spatial management because of the growth in traditional uses of the sea, the growth in new uses of the sea, conflicts among human uses of the sea, and conflicts between human uses and nature. Arguments often cited against marine spatial management are that we do not have enough data, users should have open access to the ocean, the environment loses if its direct economic value has to compete with other uses, and it's too complicated.

The outputs of marine spatial management are: marine spatial planning is a sub-activity of the planning function of sea use management; the principal output of marine spatial planning is a comprehensive marine spatial plan for a marine area or ecosystem (a vision of the future), analogous to a comprehensive plan for a terrestrial area or ecosystem; the comprehensive marine spatial plan is usually implemented through zoning map(s), regulations, and a permitting system; and individual permit decisions can then be based on the zoning maps and the marine plan.

The Outputs of Marine Spatial Management.


Sea Use Management
Sea Use Planning
Marine Spatial Planning
Sea Use Management Plan
Other Management Measures
Comprehensive Marine Spatial Plan
Ocean Zoning Maps and Regulations
Permits and Other Management Measures Used to Achieve Specified Objectives

Spatial and temporal measures include measures that specify where and when human activities can occur, including specification of areas closed to fishing or energy development, designation of marine protected areas, designation of areas for specific uses, e.g., wind farms, military operations, sand and gravel mining, waste disposal, and designation of areas by objective, e.g., conservation or development areas.

The impacts of marine spatial management include: determining priorities among different uses of marine space; it can result in "win-win" outcomes among different uses and between human uses and nature. However, it may redistribute the costs and benefits of management decisions among different groups of users and communities.

Fanny Douvere

Fanny Douvere's keynote address dealt with "Marine Spatial Planning: The International Perspective." Marine spatial planning is motivated by new demands for ocean space. All things happen in time and space, hence spatial management is intuitively right. Spatial management is developing in many countries around the world, including Australia (Great Barrier Reef, marine bioregional planning), Belgium (North Sea), Canada (LOMAs e.g., ESSIM), China (territorial sea functional zoning), Denmark (Wadden Sea), Germany (Wadden Sea, North Sea and Baltic Sea), New Zealand (MPAs), The Netherlands (North Sea and Wadden Sea), UK (Irish Sea Pilot), and USA (Florida Keys and Channel Islands). The criteria for selecting examples of good marine spatial planning practice include:

PLACE-BASED OR AREA-BASED
- Large-scale

ECOSYSTEM-BASED
- Including biodiversity conservation as a goal

MULTI-OBJECTIVE
- Including ecological, socio-economic, and governance objectives

INTEGRATED
- Across economic sectors
- Across government agencies
- With other spatial management plans, e.g., watershed plans

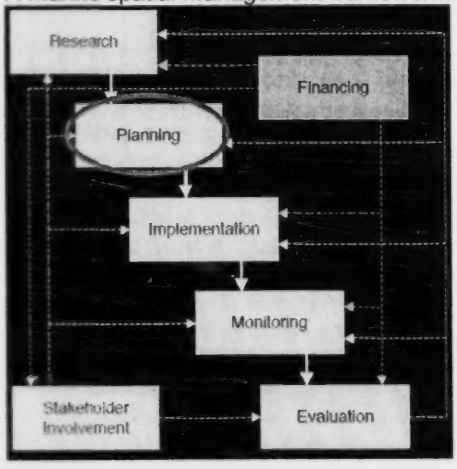
LONG-TERM PERSPECTIVE
- 10–20 years

ADAPTIVE MANAGEMENT
- Monitoring and Evaluation

PARTICIPATORY PROCESS

Early examples of marine spatial management initiatives were developed for nature conservation (e.g., the Great Barrier Reef, Florida Keys, etc). More recent marine spatial management initiatives focus on achieving multiple objectives (including nature conservation, economic development, preservation of cultural values, etc.). Some marine spatial management examples attempt to underpin marine spatial management with an ecosystem approach

A marine spatial management framework.



Marine spatial management should be conducted as a continuous, iterative process, and should contain at least three phases: (a) the research and planning phase; (b) the implementation phases; and (c) the monitoring and evaluation phase. Financing and stakeholder involvement are equally important for a successful outcome. In May 2009, UNESCO will publish a step-by-step approach on how to develop marine spatial management in which each of these phases are addressed in more depth.

Several examples of good practice were presented based on the presence of criteria for authority, stakeholder participation, planning principles, objectives and indicators, ecologically important areas, human use characterization, scenario development, plan preparation, implementation, monitoring and evaluation. Good practices that were cited with relevance for ESSIM include: establishing authority and leadership; using science to guide proactive decision-making; turning strategy into alternative spatial use scenarios; and using flexible and incremental implementation.

Other countries have created authority to start with marine spatial management in a variety of ways, as outlined below:

Australia (outside GBR): Bioregional planning on the basis of existing environmental protection;
Belgium: Established a new act for the marine environment requiring concession and exploitation permits for new ocean uses;
Germany: Extended existing Federal Land Use Planning Act to the marine environment;
Japan: Ocean Policy Research Foundation developed draft legislation that has been taken up by the government;
The Netherlands: Developed marine spatial planning on the basis of the existing national spatial planning policy by adding a chapter for the North Sea; and
United Kingdom: Is developing an entirely new legal and institutional arrangement for future ocean management, based on spatial planning.

Key components of authority for marine spatial management include: timeframe for completing the spatial plan; clear indication of who leads plan development; appropriate responsibilities and roles of agencies to develop a balanced spatial plan; principles for spatial planning; provisions for enforceability; authorization for sufficient funding to support the planning process; and provisions and timeframe for monitoring, evaluation and adaptation. Using science to guide proactive decision making was emphasized.

Boundaries for planning and analysis in marine spatial management allow us to: a) think beyond existing institutional arrangements; b) identify the origins of the problem; and c) cooperate with the relevant agencies to address the problems. Boundaries for management allow us to carry out the actions needed to implement the plan. The case of Australia's bioregional planning highlights how a bioregional profile could guide decision-making on economic development. Several economic and environmental scenarios for future use of ocean space were presented. Flexible and incremental implementation of marine spatial management was stressed.

The concepts of opportunity maps and decision rules were presented. Opportunity maps are based on negotiation between relevant government agencies; future prospects of the industry development; cost/benefit analysis of alternative actions; and ecological impact assessment. Decision rules are based on national government policies for:

- *Shallow coastal waters*: mainly water recreation and mariculture;
- *From the established NAP -20m depth contour to the 12-mile line*: surface mineral extraction;
- *From the 12-mile line seaward*: wind farms, possibly combined with mariculture.

Long-term perspectives can also accommodate issues such as climate change.

Support from the Gordon and Betty Moore Foundation, the Lucile and David Packard Foundation, WWF International, Belgian Science Policy and Fisheries and Oceans Canada was acknowledged. For more details, see the IOC/UNESCO website: http://ioc3.unesco.org/marinesp/.

Audience questions followed the keynote addresses and they are included here unattributed.

Q1. Thanks very much for your presentations. I am inherently uneasy about zoning of the oceans, but if we're going to zone the ocean, or give rights to certain pieces of the ocean for certain activities, I think it is very important that we look at what happened in Canada, and maybe not as much as in the United States, with land-use zoning. When we change a zone it's very clear to the governments and municipalities that there's no fee paid for "down-zoning." There also is no benefit paid by the person who gets an "up-zoning." And the other thing we have to put into our thinking is the principle that nobody owns a piece of the ocean floor or a volume of the ocean. It is a right if we give that right for a finite length of time, and when it is abandoned there is a bonding that requires you to remove that use so it can return to the "common heritage of humankind," which is what we were saying very widely in the world in about 1958. I'm just wondering how you have addressed the issue of changes in zoning and loss of rights that will occur when that occurs. Do you assume that there will be compensation?

Charles Ehler: We haven't thought in detail in terms of compensation. However, I completely agree with your point about the oceans belonging to the public, and it's the public trust principle that has to operate in the ocean and not private rights. I'm a little confused about why you're concerned about zoning the ocean because in one of my slides I made the point that we already do zoning in the ocean, although we don't do it in a very comprehensive way. We do allocate rights in terms of oil and gas tracts. We dump waste material in certain places. We do lots of things on an area basis, so it's already there and our point is we can do it better, and we can do it a lot more intelligently. We can deal with some of the points that you are raising, particularly in terms of modifying zones and how do you deal with compensation.

Q2. Just to make clear, I am concerned about zoning from an almost philosophical point of view. I realize it's upon us, we aren't going to escape. We're fortunate in Canada that we have huge amounts of coastline that haven't got that concentrated problem you have in Belgium or elsewhere, and we can maybe afford to do that kind of process, that biophysical zoning and start at the other end – which areas ought to be preserved like Australia may be trying to do. But, I am concerned about the creeping assumption that pieces of ocean floor can belong to people. It's a short-term use, it's not forever. The other thing that I am concerned about creeping into land-use zoning in Canada, which has already crept into the United States, is you do all the planning up-front and that locks it up and you don't involve participation ever after. We just passed a piece of legislation in Halifax yesterday, so-called "HRM by Design," and you want to watch out for that.

Q3. Comments about the planning exercise were very helpful, but for me the key was the notion that for this planning to work you need to establish authority and leadership, that you need provisions for enforceability and the authorization for funding to support the planning. In those other examples around the world, did that come about from legislation passed by the national government? Was it state or provincial governments that passed legislation? Was legislation in fact necessary, because that really is the problem that we face here? I think any cursory analysis will come to the conclusion that we don't have the regulatory mechanism for enforceability, which seriously limits this exercise.

Fanny Douvere: I believe there is a need for some kind of authority that, if you develop a plan, enables you to eventually enforce it. There is no need for developing plans if you can't enforce them. They have basically no right, and I think that's part of the problem that we have heard sometimes, or in a few of the presentations that I joined discussion with yesterday. The South-East plan in Australia, for example, started out in the 1990s with a plan developed by a research agency. It was a plan that didn't have any enforceability so it eventually led no-where. Having said that, it still was a very good exercise because now they have the legislation and they actually can take a lot of the planning that was done then – they don't have to re-do it all over again. Now the point that I made in the slides on the authority and the leadership is that it's not necessary to have an act that explicitly mandates you to do spatial planning. What a lot of countries have done around the world is using an existing act; in Belgium it was an act on the protection of the marine environment. In Australia, it was a similar act on the environment and biodiversity. In the Netherlands, for example, the national spatial policy provides the basis marine spatial management. Germany has extended its land-use planning act to the marine environment. Various countries see spatial management and spatial planning as a natural outflow, as a "natural" operational tool, or something intuitively to use in order to implement their law. If I look here, an intuitive question is, why can't the *Oceans Act*, for example, not serve as a basis for developing marine spatial planning?

Marine Spatial Planning on the Scotian Shelf: Current and Future Directions
Glen Herbert, Oceans and Coastal Management Division, Fisheries and Oceans Canada

The overall aim of the ESSIM Plan is a sustainable and practical balance of human use and conservation. The ESSIM Plan contains 30 objectives related to collaborative governance and integrated management; sustainable human use and healthy ecosystems. Many objectives can be advanced using marine spatial planning. Particularly objectives on reducing use conflicts, sustainable wealth generation, and conserving and protecting the ecosystem. The Plan also supports spatial (and temporal) planning provided it occurs within the context of agreed objectives and guiding principles; is undertaken through a coordinated process, is used at the appropriate scale for the appropriate purpose and recognizes limitations, such as lack of knowledge and multiple jurisdictional context.

There are currently many uses on the Scotian Shelf. DFO has begun to map and characterize such uses and has also been working on developing tools for integrated ocean management. There are also currently many zones that exist on the Scotian Shelf, fisheries management zones, oil and gas management zones, etc. In addition to multiple human use issues, there a number of marine conservation priorities and needs on the Scotian Shelf with a spatial component, including Marine Protected Areas, Coral Conservation Areas, Species at Risk critical habitat identification, and identification of significant and sensitive areas and species. There has been progress made and experience gained, on how in site specific spatial planning and management can be used achieve multiple objectives on the Scotian Shelf through the development of the Gully Marine Protected Area and the Coral Conservation Areas.

Action planning is now underway to implement the ESSIM Plan. Current action plans are focused on marine protected area planning, spatial conservation and the fishing sector.

Recently there have been a lot of advances made internationally on marine spatial planning. When comparing ESSIM to developing international guidelines on MSP, ESSIM has made significant progress on the background work required for MSP, however there is still a lot of work that remains. Future directions for MSP on the Scotian Shelf include incorporating MSP as a central implementation activity for the ESSIM Plan; using guidance and best practices from international experience to design a regionally appropriate approach; and focusing on building tools and an information base.

Small Group Discussion on Marine Spatial Planning

Following the presentations, participants separated into small groups and asked to respond to a series of questions related to Marine Spatial Planning. Participants were assigned to groups prior to the workshop to ensure that groups had multi-sector representation. Each group also had a facilitator and recorder. During the workshop, there were three presentations on marine spatial planning. The presentation by Charles Ehler provided definitions and concepts related to marine spatial planning, as well information about the planning process and benefits within the broader integrated ocean management context. Fanny Douvere's presentation highlighted experiences and good practices with marine spatial planning in various parts of the world. Finally, the ESSIM Planning Office provided an overview of current practices and potential future directions with marine spatial planning for our region. This presentation emphasized that a significant amount of groundwork for marine spatial planning has already been developed through the ESSIM process.

Questions

What are your thoughts on the role of marine spatial planning within the context of integrated ocean management? What do you feel are the main benefits and/or challenges involved?

What are the key elements or areas of emphasis that should be considered in moving forward with marine spatial planning? Should the focus be on stakeholder involvement? Government coordination? Communications and education? Capacity building and tool development? Others?

How would you and your sector/community of interest like to be involved in marine spatial planning under the integrated management process?

Marine Spatial Planning (MSP) Overview

A summary of the small group discussion and responses to the questions is provided below.

1. How is MSP generally viewed?
Strong support was expressed for the use of MSP in Integrated Ocean Management. It was said to be essential, necessary, critical, and logical and was identified as a fundamental tool - one of the "how's" of IM. It was noted that MSP will improve both IM and sector management.

2. Benefits
A number of benefits were associated with the use of Marine Spatial Planning.
It was noted that MSP can provide an "opportunity map" for development and conservation. This may have the potential to help achieve both conservation and socio-economic objectives.
MSP has the potential to improve stakeholder involvement, by providing a common focus. Stakeholders will share a common visual representation and develop a big picture view. MSP provides a visual platform for inclusiveness, and facilitates communication and mutual understanding; it can enhance comprehension for all.
MSP will give context to IM, and allow planning to be more coordinated. It can give certainty to the process, and assist all parties to achieve their objectives.
It can also assist with conflict avoidance and resolution, and enhance the ability of stakeholders and the ESSIM governance structure to be more proactive.

3. Challenges
A number of challenges were noted regarding MSP.
Getting buy-in from all stakeholders and involving them beyond consultation may be a challenge. A clear mandate for MSP may be needed to get explicit stakeholder buy-in. Regulation, enforcement and/or guidelines may also be needed. Strong leadership, clear priorities and objectives set, and funding provided to build an effective system will all be important.
It was pointed out that some stakeholders may be resistant to change, and want to protect what they see as their turf. Some stakeholders may fear being "zoned-out" - and the potential loss of access.
Many new uses and interests are coming, including offshore wind power and aquaculture; and, emergency preparedness and response. The ESSIM Initiative must identify these new uses and be able to factor them into the plan. When the plan comes inshore the situation will become more complex, and tools such as MSP will be especially important.
A Marine Spatial Planning process will include mechanisms for getting and organizing data, and there will be a need to merge multiple data sources. The ability to identify and close data and information gaps will be essential.
Capacity must include funding, human resources and time to do the work. There must be stakeholder capacity to understand and participate.
MSP must recognize the ocean as a dynamic system. Maps are fixed but the ocean is not. There must be a quick start to this, while also working on a long time horizon. The process must allow for the building of trust between parties - it will be essential.

4. Key Elements
Tools are important for Integrated Management. Mapping is a useful tool to identify gaps and areas of concern and opportunity.
Scale and scope will be critical. There must be clarity and understanding of the implications of decisions relating to scale, and of all decision relating to MSP in general. All decision processes must be clear and transparent.

The role of science will be important and will need to be clarified.
The overall approach must be flexible and adaptive.
Funding must be available, and firm commitments need to be made.
Data will be gathered from/by governments and other sources. Good coordination and a collaborative approach are needed to ensure consistency and the ability to build a fully integrated system.
There is potential to use a scenario-building approach, which may be helpful when planning for human uses in congested or special ecological areas.
Good communication will be required between SAC, stakeholders, governments, and the public.
Education, awareness and outreach will be needed.
The relevance of MSP to stakeholders must be clearly communicated. The participation of all stakeholders will be essential.

5. Your sector
An ESSIM Road Show will be helpful to get information back to communities and user groups.
Stakeholders need to see collaboration within governments and departments, and senior level support.
Having an open and inclusive process is essential for sector / stakeholder engagement.

5.0 MARINE PROTECTED AREAS NETWORK PLANNING IN THE MARITIMES REGION

Tracy Horsman, Derek Fenton, Kees Zwanenburg, Anna Serdynska, DFO Maritimes Region

In June 2008, the Oceans and Coastal Management Division (OCMD) of Fisheries and Oceans Canada (DFO) Maritimes Region initiated a process to design a network of ecologically and biologically significant areas for protection, including as Marine Protected Areas (MPAs) under *Canada's Oceans Act*. This initiative builds on the work under the Oceans Program over recent years to identify important areas and conservation objectives for the Region (i.e., ecologically and biologically significant areas - EBSAs). This work moves the Region toward meeting Canada's international and national commitments for marine protection and assists in achieving many of the objectives outlined in the Eastern Scotian Shelf Integrated Ocean Management (ESSIM) Plan. In particular, this work will be used to follow through with the October 2007 announcement by DFO to identify additional Areas of Interest (AOIs) for the MPA Program across Canada. For DFO Maritimes Region, this means the selection and designation of at least one new MPA by 2012. This network design effort and the selection of additional AOIs is an important contribution to meeting the objectives outlined in the Federal MPA Strategy (2005), as well as helping us advance an ecosystem-based approach to ocean management.

We have defined a network of marine protected areas as a planned and cohesive set of sites that combined address many of the identified marine conservation objectives with an explicit spatial component in the Maritimes Region. We adopted guidance for the network components from international best practices, Government of Canada, and specific strategic objectives determined through integrated management processes (i.e., the Eastern Scotian Shelf Integrated Ocean Management Plan).

Our objective for the network is to provide a long-term blueprint for conservation that identifies what is required to meet our conservation goals, and at the same time provide flexibility in identifying and selecting sites. The network design includes consideration of both representative features (i.e., seabed types, environmental conditions) and distinct or significant features or "ecologically significant areas" (i.e., important habitat for significant species; important habitat for depleted species; habitat for vulnerable/sensitive species, e.g., structure providing species; areas of high biodiversity; and areas of potential naturalness).

Representative features such as seabed types, and environmental conditions such as growing conditions, and natural benthic disturbance regimes function as surrogate information for poorly understood/studied species and/or species assemblages. Targeted species and species assemblages meet the criteria for Ecologically Significant Species and Community Properties as defined during the Oceans Action Plan.

The conservation planning software *Marxan* was used to facilitate the analysis of numerous data layers and to explore a variety of network design options. *Marxan* is spatially explicit algorithm that produces

options (i.e., map output) showing where the conservation goals can be met at the lowest "cost" (currently our cost value is assessed as total area within the network) and also reports how much and where each of the conservation goals are being met. The study area included all of the Maritimes Region (Scotian Shelf and Bay of Fundy), however many coastal areas require further assessment due to the lack of regional surveys in those areas. Additional work is underway in coastal waters to supplement the offshore *Marxan* analysis.

Several areas emerged from the analysis, and OCMD is now in the process of evaluating these with a focus on the ESSIM offshore area for consideration as candidate Areas of Interest. Fourteen distinct offshore areas emerged, and current work focuses on defining the explicit ecological objectives that each site contributes to the network as a whole. The evaluation will also consider each site's potential contribution to achieve the objectives for an *Oceans Act* MPA (Section 35.2). Socio-economic and pragmatic considerations for the establishment and management of the MPA will also be part of this evaluation. A key output from our site-by-site assessment is a sub-set of sites (termed "candidate AOIs") for discussion and consultation with stakeholders in 2009. Similarly, it is anticipated that other protected area agencies (e.g., Parks Canada and other regulators) will consider the output to determine how their mandates relate to the protection of areas identified.

Based on this feedback and further analysis, a recommendation will be made to the Minister of Fisheries and Oceans for the selection and announcement of at least one AOI. Once announced, the site will proceed through the MPA establishment process, which includes drafting regulations under the *Oceans Act* and additional consultations specific to that area.

Designing and implementing a region-wide network plan as part of ESSIM and other integrated oceans management efforts is ongoing and iterative, with additional areas evaluated and brought forward under the appropriate protection tools over time, including additional *Oceans Act* MPAs.

6.0 ISSUES AND OPPORTUNITIES FOR ACTION PLANNING AND PLAN IMPLEMENTATION

Following the break participants again gathered in small groups and asked to respond to questions related to plan implementation. During the workshop participants heard presentations, received information and discussed a wide range of topics related to the ESSIM Initiative and the implementation of the ESSIM Plan. The final session small group discussion covered three topics that have been raised at various points over the course of the workshop: roles and responsibilities, various types of planning and reporting on progress.

1. Roles and Responsibilities

The background paper and presentation outlined roles and responsibilities for the Stakeholder Advisory Council (SAC), Regional Committee on Ocean Management (RCOM), Federal-Provincial Working Group and the ESSIM Forum regarding action planning and implementation of the ESSIM Plan. How did they sound to you? Are they OK? Is anything missing? Is any expansion or clarification needed? Please explain.

2. Types of Planning

Do you have any thoughts about collaborative planning as opposed to sectoral or issue-based planning? Does everything require collaboration? What are appropriate uses of sectoral and issue-based planning?

3. Reporting on Progress

How should ESSIM Plan implementation be reported? Is a State of ESSIM Report a good idea? Should the Stakeholder Advisory Council (SAC) be the place for consolidation of action reporting and evaluation or progress toward objectives? How might that work?

ESSIM General Small Group Discussion Overview

A summary of small table discussion and responses to the questions is provided below.

1. Roles and Responsibilities

Some participants noted that the current ESSIM structure was good for planning, but wondered if it is suitable for plan implementation. We need a process to involve interested parties outside of the present boundaries. There is some support for regulations under the *Oceans Act* to get compliance for ESSIM objectives. Reports are needed from sectors and departments to indicate alignment and compliance. Participants wondered who is coordinating collaboration within the federal government. It was noted that while consensus is good, it is not always necessary or possible. It was also noted that there must be measures for dealing with conflict within ESSIM, and that long-term, stable funding for ESSIM needs to be guaranteed.

Some participants felt that SAC should be recognized by the Minister under the *Oceans Act*. It was noted that capacity is a concern, and that there is lots going on. Perhaps it would be helpful to devolve some decisions to small task groups. Perhaps for implementation SAC requires more members. ESSIM is still offshore, but we will soon need more coastal representatives and better sectoral representation too. Curiosity was expressed about how well SAC and RCOM communication. It was noted that SAC is advisory, but that decision making may be necessary for implementation. SAC membership should be refreshed. Roles and responsibilities seem vague and should be re-examined and clarified. Need ESSIM 101 for new SAC members, including consensus decision-making rules and process. The ESSIM SAC citizen seats should be filled, perhaps with a youth. The planning office needs to make implementation a priority. Participants wondered what has happened to the Federal-Provincial Working Group, and if government SAC members are responsible for getting buy-in from their respective departments.

2. Types of Planning

All types of planning are useful and should be used as necessary, depending upon the specific situation. It was felt that collaborative, sectoral and issue-based planning processes go hand in hand. All need to be linked to the ESSIM Plan, and there must be an overall consistency. All types of planning should include monitoring and evaluation. The provision of guidance for issue based and sectoral planning to ensure that they are consistent with ESSIM Plan must be considered.

It was noted that government is not well structured for collaboration, and that regulators need to adopt and be consistent with the ESSIM Plan.

It was suggested that collaboration and integration should always be there to some degree, regardless of the type of planning that is used. Sectoral and issue-based plans will benefit from input of other stakeholders. Sometimes collaboration may be required, but not full consensus. Collaboration can build relationships which may be useful in future.

3. Reporting on Progress

There is very strong support for a State of ESSIM Report. It was felt that reporting of results is essential. The planning office can lead, with help from academia and others. Perhaps this could be done every three years. In order to do state of ESSIM reporting good baseline data will be needed. It must be decided who the audience for the report will be, and it must have a clearly stated purpose. It was suggested that SAC might do the evaluation.

The ESSIM Forum is a good place for updates and information gathering, but not for strategy or deep thinking. The ESSIM Initiative should be evaluated for its process as well as substantive outcomes. Planning must include monitoring and reporting on compliance, and how performance measures are developed and indicators used. It was suggested that SAC could develop a progress report format. Some

participants liked the idea of joint SAC/RCOM oversight of the process. It was suggested that an ESSIM Forum Workshop should be held every two years.

All sectors, organizations and government departments should show links to the plan. The web site and newsletter could be used to make monitoring information available regularly. Parks Canada and EC have experience with this kind of reporting; perhaps we should see what they are doing. It was noted that an independent external auditor could be used.

Closing Remarks
Faith Scattolon, Regional Director-General, DFO Maritimes Region

Thank you for this opportunity to offer some closing remarks to what has been a successful workshop and another important milestone for the ESSIM process. Thanks to all of you who have spent the last two days working hard on these important topics and for sharing your perspectives, experience, and expertise in helping us to collectively advance integrated management. Your commitment during this workshop is not surprising given the time and energy your have demonstrated though our work on ESSIM.

The importance and value of these types of multi-sector and interdepartmental discussions should not be understated. This is what ESSIM is largely about. The ESSIM Forum Workshop series is a vital part of our overall approach to collaboration and information sharing.

Yesterday, you heard from Mimi Breton about the importance that our department and the Government of Canada places on the *Oceans Act* and the national oceans agenda, which is underpinned by integrated and ecosystem approaches to ocean and coastal management. I would like to thank all of our federal partners that work with us on ESSIM.

You can also see the strong commitment of the Government of Nova Scotia to the process, and I would like to thank Greg Roach for his remarks during the opening session. Nova Scotia has been part of ESSIM from the very beginning and we enjoy a strong partnership on ocean and coastal management. Our department is also committed to working with the province through its new Coastal Management Framework. This will bring us closer to a more seamless approach to management in both offshore and coastal areas in our region. The Regional Committee on Ocean Management is maturing and will continue to play a key role in federal-provincial coordination for our region.

And of course, the real key to success in this business is the strong involvement of all ocean sectors and communities of interest represented so well by all of you here today. I would also like to recognize the efforts of the ESSIM Stakeholder Advisory Council, which has worked hard over the last three years on the ESSIM Plan and is now committed to working with all of us on moving it forward.

Now comes the challenging but exciting work of putting this all in action. Our goal is to make the integrated management objectives and approaches integral to all of our work, programs and activities. As the sessions these past two days have shown, there is a lot of progress being made, but there is much more to be done. Thank you for being part of this event and the ESSIM process.

7.0 NEXT STEPS

The 4th ESSIM Forum Workshop represented one of the first steps towards ESSIM Plan implementation. As a continuation of the implementation process, the ESSIM Planning Office will work with the ESSIM SAC to explore implementation options supported at the workshop. Three major themes that will be examined further are Marine Spatial Planning (MSP), the development of a State of ESSIM Report, and Governance Roles and Responsibilities.

Marine Spatial Planning

Now that the ESSIM Strategic Plan is complete and implementation planning is underway, tools and options for implementation are being explored. Marine Spatial Planning has emerged as a practical way to address many of the objectives outlined in the ESSIM Plan. Although not the only means to achieve the ESSIM objectives, it is beneficial to explore its utility for implementing the ESSIM Plan. Upcoming work will focus on developing tools in support of MSP and reviewing international guidelines that are being developed and determining their applicability to the Scotian Shelf. A workshop focused on the MSP guidelines and best practices would be an appropriate mechanism to gain a better understanding of the principles and practices of MSP.

State of ESSIM Report

As implementation of the ESSIM Plan proceeds it will be important to have an evaluation and reporting mechanism in place. The ESSIM Planning Office will work with the SAC to develop an evaluation and reporting mechanism for ESSIM. The development a State of ESSIM Report was strongly supported at the workshop. The ESSIM Planning Office will develop a preferred format for a State of ESSIM Report. SAC will provide advice on the structure and contents of the report. All sectors and government departments and agencies will contribute to the development of parts of the State of ESSIM Report.

Governance Roles and Responsibilities

In addition to work on MSP and reporting, work will continue on strengthening the established governance structure. This involves more clearly defining the roles and responsibilities of the SAC and Regional Committee on Ocean Management (RCOM) as they relate to plan implementation and action planning. SAC will discuss its role as a steward of the ESSIM Plan. Its role as an advisory body and its relationship with RCOM will be clarified. SAC members will also clarify their role in sector action planning and review their membership to ensure that representation is adequate for plan implementation.

In addition to the above next steps, the ESSIM Planning Office will continue to improve communications and outreach on Integrated Coastal and Ocean Management, both within government and with the public. The ESSIM Planning Office will continue to seek Ministerial recognition of the SAC under s. 32 of the *Oceans Act* and Ministerial sign off on the ESSIM Plan in 2009.

APPENDIX I: Agenda

4th Eastern Scotian Shelf Integrated Management (ESSIM) Forum Workshop November 25th and 26th, 2008 Pier 21, Halifax, NS	
Tuesday, November 25th	
8:00 AM	Early Bird Poster Session: Background on the ESSIM Plan (coffee/tea available) SAC Hosts: Karen Traversy & John Charles Location: Welcome Pavilion
9:00 AM	Welcome Mike Murphy, Regional Director, Oceans, Habitat & Species at Risk, DFO Maritimes Region & Captain Ivan Lantz, Shipping Federation of Canada (ESSIM Stakeholder Advisory Council (SAC) Co-chairs) Mimi Breton, Assistant Deputy Minister, Oceans, Habitat & Species at Risk, DFO Greg Roach, Assistant Deputy Minister, Nova Scotia Department of Fisheries & Aquaculture Location: Kenneth C. Rowe Heritage Hall
9:30 AM	ESSIM Plan Overview Tim Hall, Regional Manager, Oceans & Coastal Management Division, DFO Maritimes Region Location: Kenneth C. Rowe Heritage Hall
10:00 AM	Break (Welcome Pavilion)
10:30 AM	Panel Discussion on ESSIM Plan Implementation Presentation (Melanie MacLean, Oceans & Coastal Management Division, DFO Maritimes Region) and Panel Discussion Panelists: Captain Ivan Lantz, Shipping Federation of Canada Kevin Squires, Maritime Fishermen's Union Roger Hunka, Maritime Aboriginal Peoples Council Karen Traversy, Coastal Coalition of Nova Scotia Jennifer Smith, World Wildlife Fund SAC Hosts: Clary Reardon & Karen McNulty Location: Kenneth C. Rowe Heritage Hall
12:00 PM	Lunch (Welcome Pavilion)
1:00 PM	Concurrent Sessions A- *ESSIM Plan Linkages with Sable Island Conservation and Management: An Exercise to Determine Future Actions* (Presentations) (Global Classroom) B- *Perspectives on Integrated Coastal and Ocean Management* (Heritage Hall) C- *The Implementation of an Information Network and Marine Cadastre in Support of Integrated Coastal and Ocean Management* (Pier 21 Boardroom) D- *Resource Management Sustainable Development Framework: Advancing Ecosystem Approaches to Fisheries Management* (Welcome Pavilion)
2:30 PM	Break and Poster Session (Welcome Pavilion)
3:15 PM	Concurrent Sessions A- *ESSIM Plan Linkages with Sable Island Conservation and Management: An Exercise to Determine Future Actions* (Moderated Panel Discussion) (Global Classroom) B- *Environmental Assessment and Integrated Management: Opportunities and Challenges for Coordination* (Heritage Hall) C- *Coastal Zone Management: Bringing ESSIM Ashore* (Welcome Pavilion)
5:00 PM	Reception (Garrison Brewing Company)

4th Eastern Scotian Shelf Integrated Management (ESSIM) Forum Workshop November 25th and 26th, 2008 Pier 21, Halifax, NS	
Wednesday, November 26th	
8:30 AM	Coffee/tea available (Welcome Pavilion)
9:00 AM	Welcome Mike Murphy, Regional Director, Oceans, Habitat & Species at Risk, DFO Maritimes Region Captain Ivan Lantz, Shipping Federation of Canada (ESSIM SAC Co-chairs) Location: Kenneth C. Rowe Heritage Hall
9:15 AM	Summary from Concurrent Sessions Bruce Smith, facilitator with the ESSIM Planning Office Location: Kenneth C. Rowe Heritage Hall
9:30 AM	*Keynote Address*: Marine Spatial Planning: A Promising New Paradigm for Applying an Integrated, Ecosystem Approach to Ocean Management Fanny Douvere & Charles Ehler, UNESCO-Intergovernmental Oceanographic Commision Location: Kenneth C. Rowe Heritage Hall
10:30 AM	Break (Welcome Pavilion)
10:50 AM	Marine Spatial Planning on the Scotian Shelf: Current and Future Directions Presentation (Glen Herbert, Oceans & Coastal Management Division, DFO Maritimes Region) and small group discussions SAC Hosts: Ray White & John Charles Location: Kenneth C. Rowe Heritage Hall
12:30 PM	Lunch (Welcome Pavilion)
1:15 PM	Marine Protected Area Network Planning Tracy Horsman and Derek Fenton, Oceans & Coastal Management Division, DFO Maritimes Region SAC Hosts: Kathryn Paree & Elizabeth MacDonald Location: Kenneth C. Rowe Heritage Hall
2:30 PM	Issues and Opportunities for Action Planning and Plan Implementation Small group discussions SAC Host: Susanna Fuller Location: Kenneth C. Rowe Heritage Hall
3:45 PM	Closing Remarks and Prize Draw Faith Scattolon, Regional Director General, DFO Maritimes Region Mike Murphy & Captain Ivan Lantz (ESSIM SAC Co-chairs)

APPENDIX II: Participants list

	Name	Affiliation
1	Adrienne Paylor	Fisheries & Oceans Canada, Central and Arctic Region
2	Aimee Gromack	Fisheries & Oceans Canada, Maritimes Region
3	Alan Ruffman	Geomarine Associates/ Sable Island Preservation Trust
4	Alexi Baccardax	St. Margaret's Bay Stewardship Association
5	Amanda Facey	Conestoga-Rovers & Associates
6	Andrew Boyne	Environment Canada
7	Angelica Silva	Fisheries & Oceans Canada, Maritimes Region
8	Anna Serdynska	Fisheries & Oceans Canada, Maritimes Region
9	April Hennigar	Sable Island Preservation Trust
10	Ashley Sprague	Canadian Parks and Wilderness Society-NS
11	Ashley Williams	Guysborough County Regional Development Authority
12	Barbara Darby	Sable Island Preservation Trust
13	Becky Field	Dalhousie Marine Affairs Program
14	Betty Beazley	Fisheries & Oceans Canada, Maritimes Region
15	Bill Wareham	David Suzuki Foundation
16	Blaire Thorne	
17	Bob Green	Nova Scotia Department of Energy
18	Bob Rutherford	Coastal Coalition of Nova Scotia
19	Brenda Bradford	Atlantic Canada Opportunities Agency
20	Brett Bancroft	Maritime Aboriginal Peoples Council
21	Bruce Cameron	Nova Scotia Department of Energy
22	Bruce Smith	BLSmith Group Work
23	Bruno Marcocchio	Sierra Club of Canada
24	Cal Ross	ExxonMobil Canada
25	Cameron Deacoff	Halifax Regional Municipality
26	Carl MacDonald	Fisheries & Oceans Canada, Maritimes Region
27	Carla Dale	Fisheries & Oceans Canada, Maritimes Region
28	Carys Burgess	AMEC Earth and Environmental
29	Catherine Binder	Fisheries & Oceans Canada, National Capital Region
30	Cathy Merriman	Marine Consultant
31	Cathy Richard	Nova Scotia Department of Intergovernmental Affairs
32	Chantal Matthews	Canadian Parks and Wilderness Society-NS
33	Charles Ehler	Consultant to IOC/UNESCO
34	Chris Annand	Fisheries & Oceans Canada, Maritimes Region
35	Chris Burbidge	Dalhousie Marine Affairs Program
36	Chris Collier	Sable Island Preservation Trust
37	Clary Reardon	Nova Scotia Department of Fisheries and Aquaculture
38	D. Leslie Burke	Fisheries & Oceans Canada, Maritimes Region
39	Danny Walmsley	Walmsley Environmental Consultants
40	Dave Duggan	Fisheries & Oceans Canada, Maritimes Region
41	David Riffe	Encana Corporation
42	Derek Fenton	Fisheries & Oceans Canada, Maritimes Region
43	Derek McDonald	Canadian Environmental Assessment Agency
44	Donna Curtis	University of New Brunswick/ Coastal CURA
45	Elizabeth MacDonald	Canada-Nova Scotia Offshore Petroleum Board

46	Eric Theriault	Canada-Nova Scotia Offshore Petroleum Board
47	Faith Scattolon	Regional Director General, Fisheries and Oceans Canada, Maritimes Region
48	Fanny Douvere	Consultant to IOC/UNESCO
49	Flemming (Razz) Rasmussen	Maritime Forces Atlantic
50	Francine Mercier	Parks Canada Agency
51	Frank Hope	St. Margaret's Bay Stewardship Association
52	Franz Kesick	Maritime Aboriginal Peoples Council
53	Fred Wendt	Halifax Regional Municipality
54	Garry MacCaull	Transport Canada
55	Garth Demont	Nova Scotia Department of Natural Resources
56	Geoff Coughlan	Fisheries & Oceans Canada, Newfoundland and Labrador Region
57	Geoff Hurley	Hurley Environment
58	Geoff LeBoutillier	St. Margaret's Bay Stewardship Association
59	Ginny Boudreau	Guysborough County Inshore Fishermen's Association
60	Glen Herbert	Fisheries & Oceans Canada, Maritimes Region
61	Gordon Cameron	Natural Resources Canada, Geological Survey of Canada
62	Graham Bondt	WWF-Canada
63	Greg Roach	Assistant Deputy Minister NS Fisheries and Aquaculture
64	Heather Aldersey	Living Oceans Society
65	Heather Breeze	Fisheries & Oceans Canada, Maritimes Region
66	Heidi Schafer	Fisheries & Oceans Canada, Maritimes Region
67	Hubert Nicholas	Unama'ki Institute of Natural Resources
68	Ian Wentzell	Atlantic Policy Congress of First Nation Chiefs
69	Ivan Lantz	Shipping Federation
70	Jacklyn Chisholm-Lightboure	Dalhousie Marine Affairs Program
71	Jason Naug	Fisheries & Oceans Canada, Maritimes Region
72	Jay Lugar	Marine Stewardship Council
73	Jay Walmsley	AECOM
74	Jen Ford	Fisheries & Oceans Canada, Maritimes Region
75	Jen Graham	Ecology Action Centre
76	Jennifer Hackett	Fisheries & Oceans Canada, Maritimes Region
77	Jennifer Smith	WWF-Canada
78	Jennifer Voutier	Fisheries & Oceans Canada, Maritimes Region
79	Jim Jamieson	Fisheries & Oceans Canada, Maritimes Region
80	John Bones	JG Bones Consulting/CPAWS BC
81	John Charles	Halifax Regional Municipality
82	Jonathan Feldgajer	Canadian Parks and Wilderness Society-NS
83	Joshua McNeely	Maritime Aboriginal Peoples Council
84	Karel Allard	University of New Brunswick
85	Karen McNulty	Guysborough County Regional Development Authority
86	Karen Traversy	Coastal Coalition of Nova Scotia
87	Kat Dillon	Sable Island Preservation Trust
88	Kathryn Parlee	Environment Canada
89	Kees Zwanenburg	Fisheries & Oceans Canada, Maritimes Region
90	Keith Cossey	Rural Secretariat
91	Kelly Francis	Fisheries & Oceans Canada, Pacific Region

92	Ken Huffman	Fisheries & Oceans Canada, National Capital Region
93	Ken Snow	Guysborough County Inshore Fishermen's Association
94	Kennedy W. Barasa	Second Counselor, Kenya High Commission in Canada
95	Kevin Davidson	Environment Canada
96	Kevin Squires	Maritime Fishermen's Union
97	Kim Himmelman	Nova Scotia Department of Energy
98	Kristian Curran	Fisheries & Oceans Canada, Maritimes Region
99	Larry Hildebrand	Environment Canada
100	Laura Hussey	Fisheries & Oceans Canada, Maritimes Region
101	LCdr Lonnie McNeill	Canadian Forces
102	Leigh-Ann Outhouse	Canadian Parks and Wilderness Society-NS
103	Liz Wilson	Dalhousie University
104	Lucia Fanning	Dalhousie Marine Affairs Program
105	Marc Clemens	Fisheries & Oceans Canada, National Capital Region
106	Marci Penney	Fisheries & Oceans Canada, Maritimes Region
107	Marie-France Dalcourt	Fisheries & Oceans Canada, Quebec Region
108	Mark Butler	Ecology Action Centre
109	Mark McLean	Fisheries & Oceans Canada, Maritimes Region
110	Mark O'Flaherty	Dalhousie Marine Affairs Program
111	Marrielle Thillet	Encana Corporation
112	Martin Willison	Dalhousie University
113	Marty King	WWF-Canada
114	Mary Rothfels	Fisheries & Oceans Canada, National Capital Region
115	Maxine Westhead	Fisheries & Oceans Canada, Maritimes Region
116	Meaghan Calcari	Gordon and Betty Moore Foundation
117	Megan Tuttle	ExxonMobil Canada
118	Mel Kotyk	Fisheries & Oceans Canada, Pacific Region
119	Melanie MacLean	Fisheries & Oceans Canada, Maritimes Region
120	Melissa Landry	Coastal CURA
121	Mike Cherry	Fisheries & Oceans Canada, Maritimes Region
122	Mike Murphy	Fisheries & Oceans Canada, Maritimes Region
123	Mimi Breton	Assistant Deputy Minister, Fisheries & Oceans Canada, Oceans Directorate
124	Odette Murphy	Fisheries & Oceans, Maritimes Region
125	Patricia Clahane	Nova Scotia Justice Department
126	Paul Boudreau	COINAtlantic
127	Paul Harvey	Nova Scotia Department of Energy
128	Paul Macnab	Fisheries & Oceans Canada, Maritimes Region
129	Penny Doherty	Fisheries & Oceans Canada, National Capital Region
130	Prassede Vella	Massachusetts Executive Office for Energy and Environmental Affairs
131	Rachel Chudnow	Canadian Parks and Wilderness Society-NS
132	Ray White	Mayor, Town of Canso / Coastal Communities Network
133	Rick Welsford	Sable Island Preservation Trust
134	Rocky Yao	Conservation and Fisheries Observer
135	Rob Johnson	Ecology Action Centre/ Sea choice
136	Rodrigo Menafra	Canada/Uruguay ICM Consultant
137	Roger Hunka	Maritime Aboriginal Peoples Council
138	Romero Da Rocha	Dalhousie Marine Affairs Program

139	Russ Henry	New Brunswick Department of Agriculture and Aquaculture and Fisheries
140	Ruth Inniss	Maritime Fishermen's Union
141	Sabine Jessen	Canadian Parks and Wilderness Society-BC
142	Sarah Scratch	Nova Scotia Department of Energy
143	Scott Coffen-Smout	Fisheries & Oceans Canada, Maritimes Region
144	Sean Weseloh McKeane	Nova Scotia Department of Fisheries and Aquaculture
145	Shannon Scott-Tibbetts	Fishermen and Scientists Research Society
146	Sigrid Kuehnemund	Fisheries & Oceans Canada, Newfoundland and Labrador Region
147	Stacey McCarthy	WWF-Canada
148	Stefan Leslie	Fisheries & Oceans Canada, Maritimes Region
149	Steve Zwicker	Environment Canada
150	Stuart Pinks	Canada-Nova Scotia Offshore Petroleum Board
151	Sue Nichols	University of New Brunswick
152	Susan Farquharson	Southwest New Brunswick Marine Resources Planning Initiative
153	Susanna Fuller	Ecology Action Centre
154	Tana Worcester	Fisheries & Oceans Canada
155	Ted Potter	Fisheries & Oceans Canada, Maritimes Region
156	Tim Hall	Fisheries & Oceans Canada, Maritimes Region
157	Tim Surette	Fisheries & Oceans Canada, Canadian Coast Guard
158	Timothy Paul	Maliseet Nation Conservation Council
159	Tom Burfitt	Hibernia Atlantic/North American Submarine Cables Association
160	Tony Charles	Saint Mary's University
161	Tracy Horsman	Fisheries & Oceans Canada, Maritimes Region
162	Valerie Bradshaw	Fisheries & Oceans Canada, Maritimes Region
163	Wayne Barchard	Environment Canada
164	William Bond	Guysborough County Inshore Fishermen's Association
165	Zach Whynot	TriNav Fisheries Consultants
166	Zoe Lucas	Sable Island Green Horse Society

APPENDIX III: MPA Network Planning Feedback Questions

A. MPA Network Design – Ecological Components

Please describe what you like or dislike about the ecological components selected to be part of the network design thus far.

What additional ecological features and related information sources would you like to see included?

Do you have any comments on the areas that have emerged thus far from the analysis? Do these areas correspond with your understanding or expectations for areas of ecological importance that would be part of a MPA network?

B. Site Selection and Evaluation

Responsible departments will be incrementally adding designations to the MPA network. For example, DFO will be selecting a site from the network design within the ESSIM area in 2009 as an Area of Interest in the MPA Program.

What do you consider as key economic considerations or criteria in evaluating and advancing the selection of future offshore sites from the ecological analysis?

Please provide any other comments on what you consider as key considerations for advancing the selection of future offshore sites from the ecological analysis, *e.g.*, legal, cultural, management, pragmatic issues.

C. Coastal Selections

Given the lack of comprehensive ecological databases for the coastal waters of Nova Scotia compared to the offshore, what primary considerations should guide the identification of coastal sites to the regional network?

D. Involvement\Next Steps

Do you support the process DFO has outlined to identify and receive feedback on Candidate Areas of Interest and the announcement of a site in early 2009? If not, what other ways would you suggest can provide input into the evaluation?

Over the long-term, what do you feel is the best means of engaging the ESSIM community in MPA network planning activities? Should MPA network planning be included as part of the processes being considered for marine spatial planning?

Would you like to have a special session with the MPA planning team to discuss the network design or DFO Areas of Interest selection process further? If so, please provide contact information.

APPENDIX IV: Summary of workshop evaluation forms

The following summary is based on the review of 25 surveys received from 4th ESSIM Forum Workshop participants, representing a return rate of 15%.

Was the agenda for the 4th Forum Workshop appropriate? Were there important topics that were left out or topics included that should not have been? Was the balance between presentations and discussion appropriate?

In general, many respondents indicated that the workshop agenda was appropriate. Although many participants felt that there was a balance of presentation and discussion, some indicated that there was little opportunity for small group discussion during day 1 of the workshop. These participants felt that an opportunity for small group discussion on day 1 would have been beneficial.

Did you feel that there was enough time during each session to address each topic adequately? Please comment on sessions that you found too long or too short.

The majority of respondents indicated that there was enough time during each session to address the topic adequately. A small number of participants felt that the session on Marine Protected Areas was too short and that this was an important item which required more time.

Was the format for small-group discussion effective? Did you feel that you had the opportunity to fully express your opinions? What could be done to improve the small group sessions?

The majority of respondents indicated that the small-group discussions were effective. There were suggestions on how small group discussions could be improved. These suggestions included using multiple breakout rooms to reduce noise, limiting the number of questions posed, clearly identifying the goal of the discussion, providing reference material and provide an opportunity to raise questions outside of the small group discussion, perhaps in plenary.

Did you like the use of concurrent sessions? Please comment on the use concurrent sessions to provide information on a variety of topics.

The majority of respondents indicated that they enjoyed the use of concurrent sessions, however the also admitted it was difficult to choose between sessions. A small number of participants indicated that they did not enjoy the use of concurrent sessions. A small number of participants also indicated that appropriate reporting on all sessions was appropriate so that participants could learn about the sessions they were unable to attend.

How did you feel about the quality of the facilitation during the workshop? How could the facilitation be improved?

On average participants indicated the quality of the facilitation during the workshop was good.

What were your favourite and least favourite parts of the workshop, and why?

Responses to this question varied from participant to participant, and a many participants did not respond to this question. There was however, some overlap in the responses related to the favourite part of the workshop. Favourite parts of the workshop included keynote address on Marine Spatial Planning and the long breaks, which provided a great opportunity for networking. Responses to the least favourite part of the workshop varied greatly and ranged from dissemination of information prior to the workshop to the venue to participant representation.

Were you satisfied with the workshop venue? What aspects could be improved (e.g. room size and layout, food service, facilities, accessibility).

The majority of respondents were satisfied with the workshop venue, although it was indicated that there were improvements that could be made. Main issues were related to acoustics and small logistical improvements. One respondent was not satisfied with the workshop venue.

Do you think that the Forum Workshop provides an effective mechanism for multi-stakeholder dialogue on important components of the implementation of the ESSIM Plan? Why or why not? What other mechanisms could be used?

The majority of respondents indicated that the Forum Workshop provides an effective mechanism for multi-stakeholder dialogue. It was suggested that there is a need for mechanisms to continue the communication between workshops and that workshops need to held more frequently or hold smaller more focused sessions in alternate years. It was also indicated that although the Forum Workshop is a useful mechanism for communication it may be difficult for rural communities to participate and there needs to be a formal mechanism for vetting of stakeholder issues

What can be done to improve the workshop in future years?

Responses to this question varied from participant to participant. Suggestions for improvement included increasing the frequency of the workshops, holding the workshop outside of Halifax, encourage under-represented stakeholders to attend and move towards an outcome oriented workshop that links with the work of the Stakeholder Advisory Council. The workshop is currently perceived as information out.